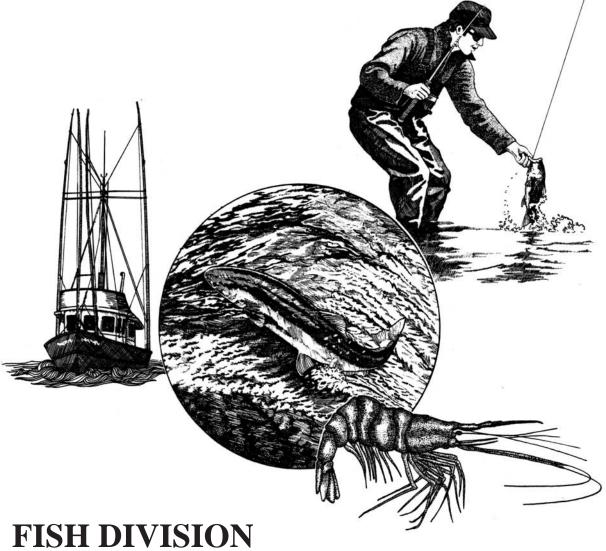
PROGRESS REPORTS

2004



Oregon Department of Fish and Wildlife

2004 Oregon Chub Investigations

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ANNUAL PROGRESS REPORT

FISH RESEARCH PROJECT OREGON

PROJECT TITLE: Oregon Chub Investigations

PROJECT NUMBERS: E-2-35 and E-2-36

PROJECT PERIOD: 1 January 2004 - 31 December 2004

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This project was financed with funds administered by the U.S. Fish and Wildlife Service (Endangered Species Act- Section 6), funds from U.S. Fish and Wildlife Service order #101812M451, funds from USDA Forest Service contract ODFW ID# 002-3216S, and funds from Oregon Department of Transportation contract #20675. The 2004 sampling period overlaps two Section 6 contracts (projects E-2-35 and E-2-36). Additional work will be done in 2005 on project E-2-36 and the results will be included in a report of 2005 field activities.

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SUMMARY

Oregon chub Oregonichthys crameri, small minnows endemic to the Willamette Valley, were federally listed as endangered under the Endangered Species Act in 1993. Factors implicated in the decline of this species include changes in flow regimes and habitat characteristics resulting from the construction of flood control dams, revetments, channelization, diking, and the drainage of wetlands. The Oregon chub is further threatened by predation and competition by non-native species such as largemouth bass *Micropterus salmoides*, crappies *Pomoxis* sp., sunfishes *Lepomis* sp., bullheads *Ameiurus* sp., and western mosquitofish *Gambusia affinis*. We surveyed in the Willamette River drainage to quantify the abundance of known Oregon chub populations, search for unknown populations, evaluate potential introduction sites, and monitor introduced populations as part of the implementation of the Oregon Chub Recovery Plan (USFWS 1998).

We sampled a total of 114 sites in 2004. A new population of Oregon chub was discovered in a small unnamed tributary to Muddy Creek (Linn County) in the Mid-Willamette River drainage. Fifty-one of the 114 sites were new locations that were sampled for the first time in 2004. Sixty-three sites, sampled in 1991-2003, were revisited. Four sites were sampled twice.

We confirmed the continued existence of Oregon chub at 29 locations. These included 21 naturally occurring and eight introduced populations. Locations of naturally occurring populations were: Santiam drainage (Geren Island, Santiam I-5 Side Channel Pond, Santiam Conservation Easement, Stayton Public Works Pond, and Gray Slough), Mid-Willamette drainage (Finley Gray Creek Swamp, Dry Muddy Creek, and Little Muddy Creek tributary), McKenzie drainage (Shetzline Pond and Big Island), Coast Fork Willamette drainage (Coast Fork Side Channels), and the Middle Fork Willamette drainage (two Dexter Reservoir Alcoves, East Fork Minnow Creek Pond, Shady Dell Pond, Buckhead Creek, Oakridge Slough, two Elijah Bristow State Park sloughs and an island pond, Barnhard Slough, and Hospital Pond). Introduced populations were located in the Middle Fork Willamette (Wicopee Pond and Fall Creek Spillway Ponds), Santiam (Foster Pullout Pond), McKenzie (Russell Pond), Coast Fork Willamette (Herman Pond), and Mid-Willamette drainages (Dunn Wetland, Finley Display Pond, and Finley Cheadle Pond).

We did not find Oregon chub at twelve locations where they were collected on at least one occasion between 1991-2003 (Jasper Park Slough, Wallace Slough, East Ferrin Pond, Dexter East Alcove, Hospital Impoundment Pond, Rattlesnake Creek, Middle Fork Willamette backwater, Elijah Bristow Large Gravel Pit, Elijah Bristow Small Gravel Pit, Camas Swale, Green's Bridge backwater, and Menear's Bend). Nonnative fish were collected at 10 of these locations.

We evaluated several potential Oregon chub introduction sites in 2004. These included sites in the Mid-Willamette River drainage (Finley National Wildlife Refuge, Ankeny National Wildlife Refuge, Aumsville Ponds, Long Tom Ranch Pond, and Jampolsky Ponds) and Santiam River drainage (Santiam Rearing Ponds and St. Paul Ponds). Two introductions were conducted in 2004 (Jampolsky Ponds and Ankeny Willow Marsh).

We obtained abundance estimates of naturally occurring populations of Oregon chub at 16 locations in the Middle Fork Willamette (East Fork Minnow Creek Pond, Shady Dell Pond, Elijah Bristow State Park Sloughs, Hospital Pond, Dexter Reservoir Alcoves, and Buckhead Creek), Santiam (Geren Island and Santiam I-5 Side Channel Pond), McKenzie (Big Island and Shetzline Pond), and Mid-Willamette drainages (Finley Gray Creek) (Table 1).

We obtained abundance estimates for eight introduced populations of Oregon chub in 2004, including populations located in Fall Creek Spillway Ponds, Wicopee Pond, Dunn Wetland

Table 1. Oregon chub population abundance from 1992-2004. Abundances are mark-recapture estimates, except those shown in bold, which are the number of fish captured. Site names in bold italics are locations were Oregon chub were introduced. The number of fish stocked in 2004 at two introduction sites is shown in parentheses. Basin codes: SANT- Santiam, MID- Mid-Willamette, MFW- Middle Fork Willamette, MCK- McKenzie, and CFW- Coast Fork Willamette. See *Methods* for definitions of five year abundance trends. Five-year trends were left blank if data was not available for at least five years, or the population abundance was not estimated using mark-recapture techniques.

Site Name	Basin	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	5 year Trend
Geren Island North Channel	SANT					8,340	8,660	1,830	860	360	760	740	1,590	2,290	increasing
Foster Pullout Pond	SANT									80	210	320	640	570	increasing
Gray Slough	SANT				2	3	2	0	13	4	2	12	270	340	
Santiam I-5 Backwaters	SANT						5	2	3	13	13	350	220	320	
Santiam Conservation Easement	SANT			1,250		830	300	250	13	4	12	2	0	1	
Santiam Public Works Pond Pioneer Park Backwater	SANT SANT						2	3 0	4	1	9	4	6	1	
Menear's Bend	SANT						2	U	U	2	9		0	0	
Green's Bridge	SANT		5			2	5	0	2	0	3	29 2	0	0	
Logan Slough	SANT		5			2	2	Ŭ	2	0	5	2	-	v	
Dunn Wetland	MID							460	4,860	14,090	26,240	19,270	28,740	25,810	stable
Finley Gray Creek Swamp	MID		370	600	460	470	520	620	4,800	730	630	290	23,740	520	stable
Ankeny Willow Marsh	MID		010	000	400	410	020	020	010	100	000	200	200	(500)	Stubie
Jampolsky Ponds	MID													(500)	
Cheadle Pond	MID												50	220	
Finley Display Pond	MID								360	1,750	670	500	130	70	declining (<500)
Little Muddy Creek tributary	MID								000	1,100	0.0	000		5	4000)
Dry Muddy Creek	MID			26			2			der	nied acces	s	22	1	
Camous Creek	MID		5			5					denied a	access			
Fall Creek Spillway Ponds	MFW						480	1,420	6,310	5,030	7,770	6,370	5,620	5,850	stable
Hospital Pond	MFW		690		780		3,160	3,030	3,020	2,980	2,700	2,130	1,600	4.940	stable
Wicopee Pond	MFW	3			0	1	9	25	160	4,580	4,080	2,410	4,100	4,780	stable
Shady Dell Pond	MFW		1,630	4,770	3,770	4,240	3,790	3,650	2,860	3,830	2,280	2,420	2,330	4,210	stable
Buckhead Creek	MFW	3	4		2				3,010	3,570	7,140	4,080	2,830	3,600	stable
East Fork Minnow Creek Pond	MFW		8,770	7,540	7,130	4,540	4,020	4,440	4,780	5,050	3,380	3,270	3,650	3,140	declining
Elijah Bristow St. Park- Berry Slough	MFW		4,010		1,930		2,010	5,350	2,720	1,190	3,970	4,910	2,140	2,950	stable
Elijah Bristow St. Park- NE Backwater	MFW								1,060	1,170	1,090	940	610	1,340	stable
Dexter Reservoir Alcove- DEX3	MFW	59			15		1,330	830	50	880	1,950	2,270	870	790	stable
Elijah Bristow Island Pond	MFW												2,780	420	
Dexter Reservoir Alcove- PIT1	MFW	780			140	40	920	450	1,130	1,440	800	460	390	70	declining (<500)
Barnhard Slough	MFW	0								3	7	2	1	2	
Oakridge Slough	MFW			4	8		2	21	480	140	140	9	1	1	
Rattlesnake Creek	MFW	7			6				1	2	2	2	2	0	
Elijah Bristow Large Gravel Pit	MFW	3			0			7	0	0	0	8	2	0	
Elijah Bristow Small Gravel Pit	MFW	31			0			22	0	0	0	0	0	0	
Hospital Impoundment Pond	MFW				6	0	1	0	1	0	0	0	0	0	
East Ferrin Pond	MEW				3,520	5,610	7,160	3,490	60	0	0	0	0	0	
Wallace Slough	MFW	40				<u> </u>	3	0	0	0	0	0	0	0	
Dexter East Alcove	MFW MFW	40		3		0	0	0	0	0	0	0	0	0	
Jasper Park Slough Middle Fark Willemotte Beckwater				3		U		U	U	U	U	U	13	0	
Middle Fork Willamette Backwater West Ferrin Pond	MFW MFW	3			2	0	0	0	0				13	U	
Shetzline Pond	MCK	2			£	5	J	5	J			120	650	1,050	
Russell Pond	MCK											470	450	720	
Big Island	MCK											940	620	310	
Herman Pond	CFW											0-10	420	350	
Coast Fork Side Channels	CFW											16	130	190	
Camas Swale	CFW	1	2	0		0			0	0	0	0	0	0	
Callas Swale	0.11	-	-	<u> </u>		5			5	Ŭ	<u> </u>	v	<u> </u>	U	

Ponds, Finley Display Pond, Finley Cheadle Pond, Foster Pullout Pond, Herman Pond, and Russell Pond. The two largest populations in 2004 were introduced populations.

The Oregon Chub Recovery Plan (U.S. Fish and Wildlife Service 1998) set recovery criteria for downlisting the species to "threatened" and for delisting the species. The criteria for downlisting the species are: 1) establish and manage 10 populations of at least 500 adult fish, 2) all of these populations must exhibit a stable or increasing trend for five years, and 3) at least three populations meeting criterion 1 and 2 must be located in each of the three recovery areas (Middle Fork Willamette River, Santiam River, and Mid-Willamette River tributaries). In 2004, there were 15 populations totaling 500 or more individuals (Table 1). Twelve of these populations met the above criteria. Eight were located in the Middle Fork Willamette drainage, two were located in the Mid-Willamette drainage.

Findings to date indicate that Oregon chub remain at risk due to the loss of suitable habitat and the continued threats posed by the proliferation of non-native fishes, illegal water withdrawals, accelerated sedimentation due to logging activities, and potential chemical spills or careless pesticide applications. Their status has improved in recent years, resulting primarily from successful introductions and the discovery of previously undocumented populations.

INTRODUCTION

Oregon chub are endemic to the Willamette River drainage of western Oregon (Markle et al. 1991). This species was formerly distributed throughout the Willamette River Valley (Snyder 1908) in off-channel habitats such as beaver ponds, oxbows, stable backwater sloughs, and flooded marshes. These habitats usually have little or no water flow, have silty and organic substrate, and have an abundance of aquatic vegetation and cover for hiding and spawning. In the last 100 years, off-channel habitats have disappeared because of changes in seasonal flows resulting from the construction of dams throughout the basin, channelization of the Willamette River and its tributaries, and agricultural practices. This loss of habitat combined with the introduction of non-native species to the Willamette Valley resulted in a sharp decline in Oregon chub abundance.

The reduction of habitat and the restricted distribution of the Oregon chub resulted in a determination of "endangered" status under the federal endangered species act (Markle and Pearsons 1990; Rhew 1993). To evaluate Oregon chub population abundance and distribution, the Oregon Department of Fish and Wildlife conducted surveys in April-October 2004. We conducted similar surveys in 1991-2003 (Scheerer et. al. 1992; 1993; 1994; 1995; 1996; 1998; 1999; 2000; 2001; 2002; 2003; 2004; Scheerer and Jones 1997). The survey objectives were to collect information on the status, distribution, and abundance of Oregon chub, the presence of non-native and native species, the characteristics of Oregon chub habitats, the characteristics of potential introduction sites, and to evaluate the success of Oregon chub introductions. In addition, we reviewed and evaluated projects and activities with the potential to impact Oregon chub and their habitats and provided summaries to the U.S. Fish and Wildlife Service.

METHODS

We conducted surveys at 114 locations in the Willamette River drainage (Figures 1-2). We sampled off-channel habitats using a 1 m x 5 m seine with 64 mm mesh. When seining was impractical due to water depth or impenetrable aquatic vegetation, we collected fish using dip nets and/or baited minnow traps. We identified and counted all fish captured. We recorded the presence of amphibian and reptile species and their life stages that were encountered.

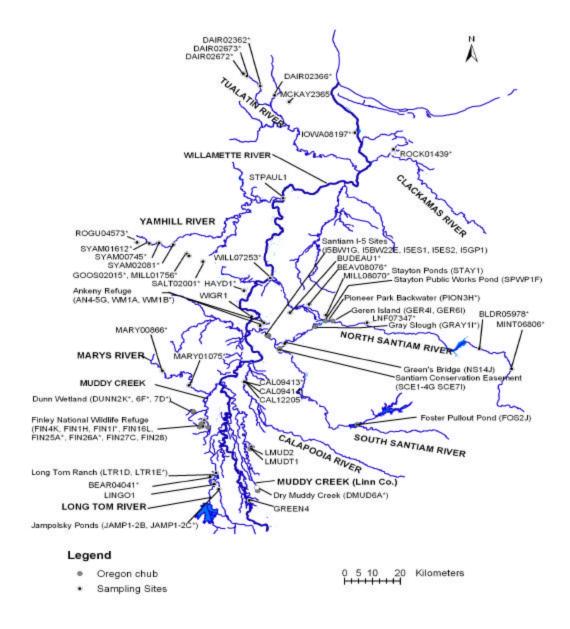
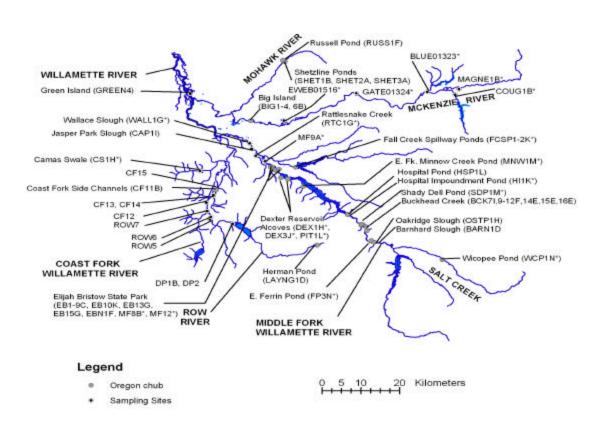


Figure 1. Survey locations for Oregon chub in the Santiam and lower and Mid-Willamette River drainages in 2004. Open circles with center dots indicate sites where Oregon chub were not collected. Solid circles indicate sites where Oregon chub were collected.



A

Figure 2. Survey locations for Oregon chub in the upper Willamette River drainage in 2004. Open circles with center dots indicate sites where Oregon chub were not collected. Solid circles indicate sites where Oregon chub were collected.

We recorded physical and biological habitat parameters at each site including substrate type, type and abundance of aquatic vegetation, mean and maximum depth, water temperature, and total surface area. We photographed each new site. We assigned a unique map code to each site. Map codes begin with several capital letters followed by a number. For example, the first site we sampled at a location was given the code "XXX1", the second site we sampled at that location was given the code "XXX2", and so on. If site we revisited site "XXX1", the first time we revisited the capital letter "A" was added to the map code (i.e. XXX1A). If the site was revisited the following year, we replaced the capital letter "A" with "B" (i.e. XXX1B), and so on. To distinguish sites we sampled in the fall from those we sampled in the spring, we added an asterisk (*) to the end of the sites we sampled in the fall. We made this distinction because of differences in habitat conditions (water temperature, pond area, vegetation, depth, etc.) that occur as water levels recede during the summer months. Hence, if we revisited site "XXX1B" in May of the following year we assigned the map code "XXX1C". If we revisited the site in September, rather than May, we added an asterisk and the map code was "XXX1C*". If we revisited the site in both May and September, we assigned the map code "XXX1C" in May and the map code "XXX1D*" in September.

We used minnow traps, measuring 23 by 46 cm with 64 mm mesh, to obtain markrecapture population estimates of all fish species at selected sites. We baited the traps with a half slice of bread and fished them for 3-18 hours. We measured total lengths (TL) of a subsample of the Oregon chub we collected in the traps (N=50). We marked all fish with a partial caudal fin clip and returned them to the water. When catch rates were low, we repeated this procedure for a second day. On the second day, we marked all unmarked fish and counted all previously marked fish in the sample. We typically marked fish until approximately 15 percent of the population was marked. We returned all fish to the water. We estimated population abundance using single-sample mark-recapture procedures (Ricker 1975). To calculate population abundance, we used the total number of marked fish, and the catch and recaptures from the last sample date. We calculated 95% confidence intervals using a Poisson approximation (Ricker 1975). Because we do not capture fish smaller than ~35 mm (TL) in the minnow traps, these fish were not included in the estimates. Excluded fish were young-of-theyear (Scheerer and McDonald 2003).

We defined abundance trends quantitatively as increasing, declining, stable, or not declining. We calculated a linear regression of abundance over time for each abundant population (>500 fish) for the past five years (2000-2004). When the slope of this regression was negative and significantly different from zero (P<0.10), we defined the population as exhibiting a declining trend in abundance. When the slope was positive and significantly different from zero (P<0.10), we defined the population as exhibiting an increasing trend in abundance. When the slope was not significantly different from zero (P>0.10), then we calculated the coefficient of variation of the abundance estimates for the past five years. When this coefficient of variation was less than 1.0 then we defined population as stable. Otherwise, we defined the population as not declining in abundance.

RESULTS

Detailed descriptions of habitat characteristics and the fish species present at each of the 114 sites sampled in 2004 are presented in **APPENDIX A**. The results of sampling conducted in 2004, summarized by Willamette River subbasin, is presented in Table 2.

Table 2. Sampling locations in the Willamette River drainage in 2004 listed by subbasin. Locations were divided into the number of new sites visited for the first time, the number of sites that were sampled in 1991-2003 and revisited in 2004, the number and percentage of sites containing Oregon chub, and the number and percentage of sites containing non-native fish. The Lower Willamette and the Mid-Willamette subbasins were further subdivided into smaller drainages.

	Nu	umber of site	es	Sites with	Oregon chub	Sites with r	<u>non-native fish</u>
Subbasin	new	revisited	total	number	percentage	number	percentage
Lower Willamette River		-		-			_
Clackamas River	1	0	1	0	0	0	0
Tualatin River	5	0	5	0	0	0	0
Yamhill River	7	0	7	0	0	2	29
Rickreall Creek	1	0	1	0	0	1	100
Mill Creek	3	0	3	0	0	0	0
Mainstem	5	2	7	0	0	3	<u>43</u> 25
Total	22	2	24	0	0	6	25
Santiam River	6	11	17	6	35	8	47
Mid Millows atta Diver							
Mid-Willamette River	•	•	•	•	•		~~~
Calapooia River	3	0	3	0	0	1	33
Marys River	3	9	12	4	25	1	8
Muddy Creek (Linn Co.)	2	1	3	2	67	1	33
Long Tom River	2	2	4	0	0	3	75
McKenzie River	4	7	11	3	27	3	27
Total	14	19	33	9	27	9	27
					. –		
Coast Fk. Willamette River	8	4	12	2	17	11	92
Middle Fk. Willamette River	1	27	28	13	46	12	43
	I	21	20	13	40	12	40
							<u> </u>
Grand Total	51	63	114	30	26	46	40 ^a

^a Non-native fish were collected at 41% of the new sites (21 out of 51 sites) that we sampled in 2004.

Population Estimates

In 2004, we obtained population estimates for Oregon chub at 24 locations (Table 3). These annual abundance estimates allow us to monitor the status of Oregon chub in relation to recovery goals (U.S. Fish and Wildlife Service 1998) and to determine which populations of Oregon chub are sufficiently large to be used as donor populations for reintroduction efforts.

We estimated the population abundance of Oregon chub at 11 locations in the Middle Fork Willamette River drainage. The Middle Fork Willamette drainage contains the greatest concentration of large Oregon chub populations (>500 fish) in the Willamette Valley. In 2004, there were nine populations in the Middle Fork Willamette drainage that totaled 500 or more adult Oregon chub. Eight of these populations have been stable or increasing in abundance for the past five years (Table 1). Most of the Middle Fork Willamette chub populations increased in abundance in 2004, compared to 2003 estimates. Many of these populations declined following the 2001 drought, which reduced the surface area of these locations and may have resulted in lower survival of the 2001 brood.

The largest population of Oregon chub in the Middle Fork Willamette drainage was located in the Fall Creek Spillway Ponds ($\hat{N} = 5,850$), site of a 1996 introduction. The second largest population in the drainage was Hospital Pond ($\hat{N} = 4,940$). Oregon chub abundance in Hospital Pond declined steadily from 1997 through 2003. Favorable conditions resulting from a wet spring and a full Lookout Point reservoir produced a very strong 2002 year-class (Scheerer and Terwilliger 2003) that was first vulnerable to our traps as adults in 2004. The third largest population in the drainage was located in Wicopee Pond ($\hat{N} = 4,780$), site of a 1988 introduction. Other locations where chub abundance was estimated in the basin include Shady Dell Pond ($\hat{N} = 4,210$), Buckhead Creek ($\hat{N} = 3,600$), East Fork Minnow Creek Pond ($\hat{N} = 3,140$), Elijah Bristow Berry Slough ($\hat{N} = 2,950$), Elijah Bristow State Park North Slough ($\hat{N} = 1,340$), Dexter Reservoir RV Alcove (DEX3I*; $\hat{N} = 790$), Elijah Bristow Island Pond ($\hat{N} = 420$), and Dexter Reservoir Alcove "The Pit" ($\hat{N} = 70$). Only East Fork Minnow Creek Pond and Dexter Reservoir Alcove "The Pit" had declining 5-year abundance trends. Both sites have lost pond surface area in the past 10 years. Nonnative fish were collected from both Dexter Reservoir alcoves.

We estimated the population abundance of Oregon chub at four locations in the Santiam River drainage. In 2004, there were two populations in the Santiam drainage that totaled 500 or more adult Oregon chub. Both of these populations have been increasing in abundance for the past five years (Table 1). The largest Oregon chub population in the Santiam drainage was located in the Geren Island North Channel (GER4I). Population abundance has increased from a low of 360 fish in 2000 to 2,290 fish in 2004. No Oregon chub were collected from Geren North Channel (GER6H) in 2004. Non-native bluegill and bullhead have increased in abundance in the North Pond since the pond was flooded in 1996. Screening of intake from the North Santiam River to the North Channel and between the North Channel and North Pond was completed in 2002 to prevent further invasion by non-native fish. The second largest chub population in the Santiam drainage was the introduced population in Foster Pullout Pond (FOS2J) in the South Santiam subbasin ($\hat{N} = 570$). Other large populations in the basin were located in Gray Slough ($\hat{N} = 340$) and in the Santiam I-5 Side Channel Pond ($\hat{N} = 320$).

We estimated the population abundance of Oregon chub at seven locations in the Mid-Willamette River drainage. In 2004, there were four populations in the Mid-Willamette drainage (including the McKenzie River) that totaled 500 or more adult Oregon chub. Two of these populations were stable or increasing in abundance for five years (Table 1). The largest Oregon chub population in the Willamette drainage was located at Dunn Wetland Ponds. This population was introduced in 1997-1998. The population abundance totaled 25,810 fish in 2004. The Oregon chub population abundance in Gray Creek Swamp on Finley National Wildlife

		95% Confide	ence Limits	
Location	Estimate	lower	upper	
	Santiam River Drai	inage		
Geren Island North Channel	2,290	1,740	3,360	
Foster Pullout Pond	570	370	1,240	
Gray Slough	340	230	500	
Santiam I-5 Side Channel	320	240	500	
	Mid-Willamette Riv	ver Drainage		
Dunn Wetland Ponds	25,810	19,910	33,420	
Finley Gray Creek Swamp	520	380	840	
Finley Cheadle Pond	220	130	710	
Finley Display Pond	70	50	130	
	McKenzie River D	rainage		
Shetzline Pond	1,050	780	1,590	
Russell Pond	720	560	1,010	
Big Island	310	220	550	
	Coast Fork Willam	ette River Drainag	e	
Herman Pond	350	220	840	
Coast Fork Side Channels	190	110	600	

Table 3. Estimates of the 2004 population abundance of Oregon chub at locations in the Willamette Valley, Oregon.

Table 3 (continued).

	95% Confide	ence Limits
Estimate	lower	upper
ddle Fork Willan	nette River Drainag	je
5,850	4,770	7,170
4,940	4,230	5,950
4,780	3,890	5,870
4,210	3,470	5,110
3,600	2,570	5,610
3,140	2,700	3,660
2,950	2,240	4,350
1,340	1,130	1,640
790	460	1,330
420	240	720
70	30	120
	ddle Fork Willan 5,850 4,940 4,780 4,210 3,600 3,140 2,950 1,340 790 420	Estimate lower ddle Fork Willamette River Drainage 5,850 4,770 4,940 4,230 4,780 3,890 4,210 3,470 3,600 2,570 3,140 2,700 2,950 2,240 1,340 1,130 790 460 420 240

Refuge increased from 230 fish to 520 fish in 2004. The abundance of the introduced chub population in Finley Display Pond has decreased steadily from 1,750 fish in 2000 to 70 fish in 2004. No recruitment has been noted in the past 3 years. The chub population in Finley Cheadle Pond, site of a 2002 introduction, increased to 220 fish.

We estimated the population abundance of three Oregon chub populations in the McKenzie River drainage. The most abundant chub population in the McKenzie drainage was located in Shetzline South Pond, near Marcola. This chub population increased from 650 fish in 2003 to 1,050 fish in 2004. The chub population abundance at Big Island decreased from 940 fish in 2002 to 310 fish in 2004. The Oregon chub population abundance in Russell Pond, site of a 2001-2002 introduction, increased to 720 fish.

We estimated the Oregon chub population abundance at two sites in the Coast Fork Willamette drainage. The chub population located in the Coast Fork Side Channels near Saginaw was estimated at 190 fish. The chub population introduced into Herman Pond in the Row River subbasin was estimated at 350 fish. The Coast Fork Willamette subbasin was not identified as a targeted subbasin for recovery when the Oregon Chub Recovery Plan was written in 1998, because Oregon chub had not been collected from the subbasin since 1991, despite widespread surveys. The discovery of a new population in Coast Fork Side Channels in 2002 changed our view, and this subbasin is now included on the list of subbasins for chub recovery.

DISCUSSION

Currently there are twelve populations totaling 500 or more individuals that have exhibited a stable or increasing trend for the past five years (Table 1, Figure 3). Eight of these populations are located in the Middle Fork Willamette drainage, two populations are located in the Mid-Willamette drainage, and two populations are located in the Santiam drainage. We have made significant progress in increasing both the number of known populations of Oregon chub and the number of large populations (>500 fish) in the Willamette drainage over the past six years (Table 4). Most populations of chub are currently isolated from other chub populations due to the reduced frequency and magnitude of flood events and the presence of migration barriers such as impassible culverts and permanent, high beaver dams. Genetic exchange between populations is believed to be minimal. We defined a population as those chub that occupy a single location. If there is an open connection and the potential for frequent movement of chub between adjacent sloughs or ponds, then we consider adjacent sites to be a single population (for example- the two sloughs at the Santiam Conservation Easement).

Status of Naturally Occurring Populations

In 2004, there were ten naturally occurring populations of Oregon chub that totaled 500 or more individuals in the Willamette River basin; seven were located in the Middle Fork Willamette drainage (Table 1). Eight naturally occurring chub populations (>500 fish) have exhibited a stable or increasing trend for the past five years. These include Geren Island, Finley Gray Swamp, Hospital Pond, Shady Dell Pond, Buckhead Creek, Elijah Bristow Berry Slough, Elijah Bristow Northeast Slough, and Dexter Reservoir Alcove "DEX3".

Status of Introduced Populations and Habitat Restoration Projects

A major recovery effort for Oregon chub recovery has focused on the introduction of Oregon chub into suitable habitats within their historic range. Several new populations have been established since 1988. In addition, several habitat restoration projects have been Figure 3. Abundance trends (linear regressions) for Oregon chub populations from 2000 through 2004. Horizontal bars represent 95% confidence intervals for each estimate. Fitted regression lines are shown where significant slopes occur.

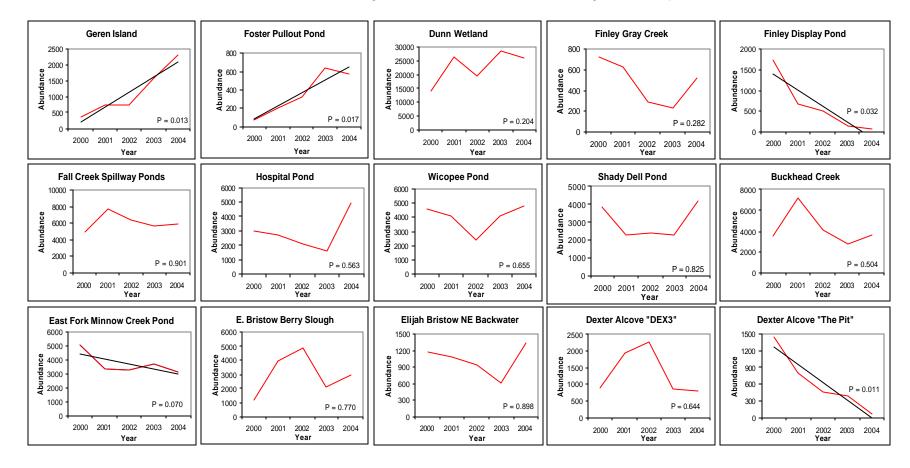


Table 4. Status of Oregon chub recovery efforts, 1998-2004.

	San	tiam	Mid-Wil	lamette ^a	M. Fk. W	/illamette	C. Fk. W	/illamette	All sub	basins
Number of populations	1998	2004	1998	2004	1998	2004	1998	2004	1998	2004
Total	4	6	2	11	12	13	0	2	18	32
Large (>500 adults)	1	2	1	4	7	9	0	0	9	15
Viable (>500 adults, stable or increasing for 5 years) ^b	0	2	1	2	1	8	0	0	2	12
Introduced ^c	0	1	2	6	4	2	0	1	6	10
Extirpated (since 1991)	0	3	0	0	4	9	1	1	5	13

^a The McKenzie drainage is included in Mid-Willamette recovery area.

^b Recovery criteria are from the Oregon Chub Recovery Plan.

^c Failed introductions (N=3) were not included in the totals.

Table 5. Status of Oregon chub introductions and habitat restoration projects. Oregon chub abundance was determined from markrecapture population estimates. Numbers in bold are the number of fish captured when no mark-recapture estimates were obtained. Numbers in parentheses are the number of fish stocked. Basin codes: MID= Mid-Willamette River basin, MFW= Middle Fork Willamette River basin, SANT= Santiam River basin; MCK= McKenzie River basin; and CFW= Coast Fork Willamette River basin. Ownership codes: ACOE= U.S. Army Corps of Engineers, USFS= U.S. Forest Service, and USFWS= U.S. Fish and Wildlife Service.

Site Name	Basin	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Donor Site	Ownership
Dunn Wetland	MID				(200)	(373) 460	4,860	14,090	26,240	19,270	28,740	25,810	Geren Island, Elijah Bristow, Shady Dell	private
Fall Creek Spillway Ponds	MFW			(500)	480	1,420	6,310	5,030	7,770	6,370	5,620	5,850	East Fk Minnow Pond, Shady Dell Pond	ACOE
Wicopee Pond	MFW		0	1	9	25	160	4,580	4,080	2,410	4,100	4,780	Dexter Alcove "The Pit" (1988)	USFS
Lower Buckhead Ponds ^a	MFW						4	4	1,430	1,220	610	1,130		USFS
Russell Pond	MCK								(350)	(150) 470	450	720	Buckhead Creek	private
Foster Pullout Pond	SANT						(85)	(20) 80	(75) 210	(50) 320	(158) 640	(112) 570	Geren Island	ACOE
Ankeny Willow Marsh	MID											(500)	Dunn Wetlands	USFWS
Jampolsky Ponds	MID											(500)	Dunn Wetlands	private
Herman Pond	CFW									(400)	420	350	Fall Creek Spillway Ponds	USFS
Cheadle Pond	MID									(50)	50	220	Finley Display Pond	USFWS
Finley Display Pond	MID					(60)	(45) 360	1,750	(49) 670	500	130	70	Finley Gray Swamp	USFWS
Menear's Bend	SANT							(15)	7	(26) 29	0	0	Geren Island	ACOE
East Ferrin Pond	MFW	(576)	3,520	5,610	7,160	3,490	60	0	0	0	0	0	East Fork Minnow Pond	USFS
West Ferrin Pond	MFW	(525)	2	0	0	0	0					0	Shady Dell Pond	USFS
Hospital Impoundment Pond ^a	MFW		6	0	1	0	1	0	0	0	0	0		ACOE

^a These sites are habitat enhancement projects where no Oregon chub were introduced. Oregon chub colonized these sites naturally.

completed to increase the quantity of habitat or enhance the suitability of habitat for Oregon chub. In 2004, there were five introduced populations that totaled 500 or more fish, four of these populations have had a stable or increasing trend in abundance for the past five years (Table 1).

In 2004, we monitored Oregon chub introductions at nine locations: Wicopee Pond, Ferrin Ponds, Fall Creek Spillway Ponds, Dunn Wetland Ponds, Finley Display Pond, Finley Cheadle Pond, Foster Pullout Pond, Russell Pond, and Herman Pond, and we monitored habitat restoration projects at three locations: Finley Refuge, Hospital Impoundment Pond, and Lower Buckhead Creek Ponds (Table 5). These introduction and habitat enhancement efforts have been generally successful.

Wicopee Pond was the site of a 1988 introduction of 50 Oregon chub from the Dexter Reservoir Alcove "The Pit". The pond is a former borrow pit adjacent to Salt Creek in the Middle Fork Willamette River drainage. Small numbers of Oregon chub were collected from the pond between 1992 and 1999. In 2000, the population abundance increased dramatically. In 2004, the chub abundance was estimated at 4,780 adults and the population has had a stable five-year abundance trend.

Ferrin Ponds were the sites of habitat restoration projects completed by the U.S. Forest Service in 1993. These former borrow pits were deepened and permanent water control structures were constructed. Non-native fish (largemouth bass, western mosquitofish, and crappies) were poisoned using a rotenone treatment. Oregon chub were introduced into West Ferrin Pond (N=525) and East Ferrin Pond (N=576) in 1994. Oregon chub were collected from both ponds in May 1995; however no Oregon chub have been collected in West Ferrin Pond since 1995. The rotenone treatment was ineffective in eliminating the western mosquitofish and they quickly became abundant in both ponds. In 1997, the Oregon chub population in East Ferrin Pond was 7,160 fish. In 1998, largemouth bass were first observed in the pond and were believed to have been illegally introduced into the pond. The chub population declined rapidly. No Oregon chub population was encouraging, however the subsequent collapse of the population after largemouth bass were introduced illustrates the continued threat that non-native predators pose to Oregon chub survival and recovery.

In 1996, Oregon chub were introduced into the Fall Creek Spillway Ponds, located in the overflow channel below Fall Creek Dam on U.S. Army Corps of Engineers property. The ponds were formed by beaver dams that blocked the spillway overflow channel. The beaver dams have been in existence for approximately 15 years. A total of 500 Oregon chub were introduced in 1996, 150 from Shady Dell Pond and 350 from East Fork Minnow Creek Pond. After the introduction, the chub population abundance increased rapidly, increasing to 6,300 fish in 1999. This was the third largest Oregon chub population in 2004 and the population has had a stable five-year abundance trend.

In 1994, a large habitat enhancement project was completed at the Dunn Wetlands in the Muddy Creek drainage in Benton County. Approximately 12 hectares of wetland were restored and a permanent (year round) spring-fed pond was constructed. Two additional permanent ponds were constructed in 1997 and 1999. The entire wetland floods during the winter and the ponds are interconnected. Oregon chub were introduced into this site in 1997 (N=200) and 1998 (N=373). In 2004, the population totaled 25,810 fish and was the largest chub population in the Willamette Valley. This population has had an increasing five-year abundance trend.

A multi-year habitat enhancement project was completed in 2003 in the Muddy Creek drainage on Finley National Wildlife Refuge. The goal was to move portions of the Gray Creek chub population to suitable locations on the refuge to reduce their risk of extinction and expand their numbers. The project involved habitat restoration of two ponds in the Gray Creek drainage (Display and Beaver Ponds) and the creation of another pond (Cheadle Pond). Display Pond was drained in 1996 to remove the non-native fish. Oregon chub from Gray Creek Swamp were introduced into Display Pond in 1998 (n=60), 1999 (n=45), and 2001 (n=49). The chub population abundance was estimated at 1,750 fish in 2000, but has declined steadily since then. Recruitment failure is the suspected cause of this decline. No small fish (<50 mm) have been collected in the past two years. We conducted surveys during the summer of 2003 and found very few juvenile chub (<25 mm). In 2002, we introduced 50 chub from Display Pond into Cheadle Pond. We estimated the chub abundance in Cheadle Pond to be 220 fish in 2004. During the summer of 2003, the U.S. Fish and Wildlife Service completed the Beaver Pond habitat project. They replaced the spillway and water control structure and deepened the pond to prevent desiccation. Native fish colonized the fish in 2004 (threespine sticklebacks, speckled dace, redside shiners). We will continue to monitor the site to determine whether Oregon chub colonize this pond from Gray Creek Swamp, which is located upstream. Oregon chub will be introduced into the pond, if they do not colonize on their own.

Foster Pullout Pond is located on U.S. Army Corps of Engineers property on the north shore of Foster Reservoir in the South Santiam River drainage. The pond is perched several meters above the reservoir full pool level, is spring-fed, and the water level is maintained by a beaver dam at the outflow. We introduced 500 Oregon chub into the pond from Geren Island between 1999 and 2004. In 2004, we estimated the chub population abundance at 570 fish.

Menear's Bend Pond is located on U. S. Army Corps of Engineers property in the Middle Santiam drainage upstream of Foster Reservoir. The pond is a small beaver pond that is fed by a small tributary and springs. We introduced Oregon chub from Geren Island in 2000 (n=15) and 2002 (n=26). The pond dried up in 2003.

Russell Pond is located on private land in the McKenzie River drainage. The pond is a small spring-fed farm pond that is isolated from the Mohawk River at all flow levels. We introduced Oregon chub into the pond from Buckhead Creek in October 2001 (n=350) and May 2002 (n=150). We estimated the Oregon chub population abundance at 720 fish in 2004.

Hospital Impoundment Pond is located in Lookout Point Reservoir (Middle Fork Willamette drainage) adjacent to Hospital Pond. The U.S. Forest Service and the U.S. Army Corps of Engineers constructed the pond in 1994. They excavated the pond in a former railroad grade in the drawdown zone of the reservoir. The outflow from Hospital Pond was diverted into the pond. The project was designed to benefit western pond turtles and Oregon chub. The fish community in this pond varies each year, depending on which species enter the pond from Lookout Point Reservoir or Hospital Pond. We collected non-native fish, which originate from the reservoir, in 1995 and 1997 through 2004. We collected a few Oregon chub in 1995, 1997, and 1999. The pond appears to provide few benefits for Oregon chub.

The Lower Buckhead Enhancement Ponds are located in the Buckhead Creek floodplain in the Middle Fork Willamette drainage. The U.S. Forest Service constructed three shallow offchannel ponds in 1998. They excavated these ponds to increase the amount of off-channel habitat available for Oregon chub. The ponds are connected to the creek during typical winter high-flow events. In 2004, we found two of the ponds to contain Oregon chub (n=1,130).

Herman Pond is an isolated, spring-fed pond located in the Coast Fork Willamette River drainage on U.S. Forest Service Property. In 2002, we introduced 400 Oregon chub. In 2004, we estimated the chub population abundance at 350 fish.

Willow Marsh is a large pond located on Ankeny National Wildlife Refuge. The pond was modified in 2003 and 2004 to deepen the pond and isolate it from an adjacent marsh that contains nonnative fish. In 2004, we introduced 500 Oregon chub from Dunn Wetlands.

Jampolsky Ponds are part of a wetland restoration project completed in 2000 on private land in the Amazon Creek drainage (Long Tom River). In 2004, we introduced 500 Oregon chub from Dunn Wetlands.

Identification and Evaluation of Potential Introduction Sites

New populations of Oregon chub are established by introductions to suitable habitats within their historical range. A minimum of 400 fish are to be used when establishing new fish populations to avoid genetic bottlenecks. The Oregon Chub Recovery Plan states that a maximum of 10% of a population may be removed for an introduction in any one year. Donor stocks should be in the same subbasin as the introduction site, whenever possible. Potential Oregon chub introduction sites were identified and evaluated using the following guidelines:

- 1. Restrict introductions to the historic distribution of Oregon chub.
- 2. Restrict introductions to protected sites that are secure from imminent or future threats of habitat destruction (*invasion by warmwater fish is included in this category*).
- 3. Restrict introductions to sites where the potential for dispersal has been determined and is acceptable (all proposed sites meet this criterion).
- 4. Restrict introductions to sites that likely fulfill life history requirements. Features include small ponds, less than 1,000 meters in elevation, depositional substrate, gradually sloping banks, varied and abundant aquatic vegetation, little or no water velocity, mostly less than 2 meters deep, limited use or access by the public, no non-native fish species, and summer water temperatures exceeding 16°C. Site manipulations to comply with this guideline are permissible. Introductions and site manipulations will be coordinated with landowners of proposed sites. A site management plan will be developed prior to introduction and coordination will occur with the landowner and/or managing agencies.
- 5. Restrict introductions to sites that contain sufficient habitat to support a genetically viable population (all proposed sites meet this criterion).
- 6. Prohibit introductions into areas where other rare or endemic taxa could be adversely affected (all proposed sites meet this criterion because Oregon chub are not a known threat to any rare or endemic taxa).

Following are descriptions of the locations that were evaluated as potential introduction sites for Oregon chub in 2004.

- Beaver Pond- This pond is located in the Gray Creek drainage on the Finley National Wildlife Refuge in Benton County. The pond has dried up most years between 1991 and 2002. One Oregon chub was collected from Beaver Pond in 1990 (personal communication, Dr. Douglas Markle, Oregon State University). Presumably this fish moved downstream from Gray Creek Swamp. In 2003, a habitat enhancement project was completed to reconstruct the dike, replace the water control structure, and deepen the pond to maintain water levels throughout the summer months. Water levels and reestablishment of aquatic vegetation were monitored in 2004. Native fish were collected in 2004, but no Oregon chub were found. We will wait several years to see whether Oregon chub colonize the site naturally. If colonization does not occur naturally, we will introduce fish from Gray Creek Swamp.
- 2. *Brown Creek Ponds* These ponds are located on Finley National Wildlife Refuge in Benton County. The ponds were constructed in the lower Brown Creek drainage in 1999. Water control structures were completed in 2000. The vegetation in the north pond has become well established. The refuge has the ability to divert water into either pond. We recommend focusing on the north pond for a future chub introduction.
- 3. *South-Dunlin-Woodduck Ponds-* This site is located on Ankeny National Wildlife Refuge in Marion County. The site was first sampled in 1991. A major habitat enhancement project

was completed in 1998. Initially, the site was drained to remove non-native fish. Then the site was recontoured, deepened, and a new dike and water control structure were constructed. The enhancement project created abundant shallow water vegetated habitat. The dike reconstruction and water control structure were designed to prevent invasion by non-native fish. No fish were collected in 1999-2001. Threespine sticklebacks were collected in 2003 and 2004. The site has suitable habitat for Oregon chub. The U.S. Fish and Wildlife Service is attempting to secure an additional source of water (wells, diversion) to increase the pond area available to Oregon chub during the summer months.

- 4. Long Tom Ranch- This site is located near the confluence of Amazon Creek and the Long Tom River in Lane County. A large wetland restoration project was completed in 1999. Partners for Wildlife funds were used to create a large pond for Oregon chub. The aquatic vegetation was well established in the pond by September 2002. Non-native fish were collected in May 2003. The U.S. Fish and Wildlife Service modified the pond in 2003 to exclude access by non-native fish. The pond was dried up to remove existing non-native fish. Nonnative fish were again collected from the pond in 2004. We will attempt to determine how nonnative fish entered the pond (overland flow during high water events?) and correct this situation.
- 5. Stayton Ponds- This location is the site of former ODFW salmon rearing ponds in the North Santiam drainage near Stayton (Marion County). The facility was no longer being used to rear salmon and the ponds were drained. Water control structures were damaged during the 1996 floods. A habitat enhancement project was completed in 2004 to create two chub ponds in a portion of the existing wetland area. We will monitor the establishment of aquatic vegetation and the degree of isolation during high flow events before Oregon chub will be introduced.
- 6. *Aumsville Ponds* This site is located in the Mill Creek drainage in Marion County. The site is owned by Marion County. Planning for a restoration project is in progress. The site was a former ODFW rearing facility and consists of a series of shallow earthen ponds. There is an historic record of one Oregon chub collected from the site in 1979. Non-native fish were abundant in 1991; no Oregon chub were collected. The restoration project would create an isolated Oregon chub pond. Non-native fish would be removed and excluded.
- 7. *St. Paul Ponds* This site is located in the Willamette River drainage in Marion County. The site is owned by ODFW. The site was a former ODFW warmwater rearing facility and consists of a series of shallow earthen ponds. A restoration project is currently in the planning stages.
- 8. *Strube Flats-* This site consists of a series of ponds located downstream of Cougar Reservoir on a side channel to the South Fork McKenzie River on U.S. Forest Service Property. Habitat is suitable for Oregon chub. Only native fish were present (speckled dace, sculpins, and cutthroat trout).
- 9. *Magne Pond* This site is located on private property in the McKenzie River drainage near Cougar Reservoir. Habitat is suitable for Oregon chub. Only cutthroat trout are present in the pond. A new water control structure is needed to replace an aging notched log.

Threats to Oregon Chub and Limitations to Their Recovery

Oregon chub continue to be impacted by human activities. During the past decade, Oregon chub populations have been threatened by illegal water withdrawals, unauthorized fill and removal activities, timber harvest, highway and pipeline construction, roadside herbicide applications, chemical spills, and routine culvert cleaning operations. However, the proliferation of non-native fish is the largest current threat to Oregon chub populations. Non-native fish have been collected from 42 percent of the 651 sites we have sampled in the Willamette Valley since 1991 and 54 percent of those sites that contained fish. After the 1996 floods, non-native fish were first collected from several Oregon chub sites in the Santiam River drainage; the two largest populations subsequently declined sharply in abundance (Scheerer 2002). Illegal planting of largemouth bass into an introduction site in the Middle Fork Willamette River drainage coincided with the collapse of a Oregon chub population that had once totaled more than 7,000 fish. Non-native fish are well established throughout the Willamette Valley. They threaten to invade sites containing Oregon chub and limit the ability of Oregon chub to migrate from existing sites and colonize suitable habitats elsewhere. Non-native fish are more common in off-channel habitats in the Santiam and Mid-Willamette River drainages than in the Middle Fork Willamette and McKenzie River drainage (Scheerer 2002).

Recovery of Oregon chub in the Santiam and Mid-Willamette subbasins is severely limited by the proliferation of non-native fish in off-channel habitats. The resulting paradox is that the frequent interaction of the river with the floodplain habitats in these particular subbasins, conditions which historically created off-channel habitats and aided in the dispersal of chub and the interchange of individuals among populations, now poses a threat to Oregon chub by allowing dispersal of nonnative species (Scheerer 2002). Because of the threats posed by nonnative fish, and the loss and fragmentation of suitable Oregon chub habitats, we have few options other than to manage chub populations in isolation. This approach has potentially severe genetic consequences. Genetic analyses that are under way will assist in determining the extent of genetic drift and inbreeding in existing populations and will help guide future management. Managers may be assigned the task of moving fish among certain populations, both natural and introduced, to maintain and enhance the genetic variability necessary for the persistence and recovery of this species.

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APPENDIX A

Fish Species and Habitat Characteristics at Each Survey Location

Sites are sorted by major recovery basin then listed alphabetically by map code.

¹ Vegetation types are expressed as a percentage of the total surface area of the site.

² Vegetation codes:

ACER	Big leaf maple (Acer macrophyllum)
ALIS	Water plantain (<i>Alisma</i> sp.)
ALNU	Alder (<i>Alnus</i> sp.)
ATRO	Nightshade (Atropa belladona)
AZOL	Water velvet (Azolla sp.)
BIDE	Beggars tick (Bidens sp.)
CABO	Fanwort (<i>Cabomba</i> sp.)
CALI	Water starwort (Callitriche sp.)
CARE	Sedge (<i>Carex</i> sp.)
CERA	Coontail (Ceratophyllum sp.)
CHAR	Stonewort (Chara sp.)
CORN	Red osier dogwood (Cornus sericea)
DOWN	Box elengia (Downingia elegans)
ELEO	Spike rush (<i>Eleocharis</i> sp.)
ELOD	Waterweed (Elodea sp.)
EQUI	Horsetail (Equisetum sp.)
FILA	Filamentous Algae
FONT	Water moss (Fontinalis sp.)
FRAX	Oregon ash (Fraxinus latifolia)
GRAM	Grasses (Gramineae)
IRIS	Yellow iris (Iris pseudacorus)
JUNC	Rush (<i>Junca</i> s sp.)
LEMN	Duckweed (Lemna minor)
LOTU	Birdsfoot trefoil (Lotus corniculaus)
LUDW	False loosestrife (Ludwigia palustrus)
LYSI	Skunk cabbage (Lysichiton americanum)
MENT	Mint (<i>Mentha</i> sp.)
MYRI	Water milfoil (Myriophyllum sp.)
NONE	No aquatic vegetation
NUPH	Yellow water lily (Nuphar sp.)
NYMP	White water lily (Nymphaea sp.)
OENA	Water celery (Oenanthe sp.)
POLY	Smartweed (Polygonum sp.)
POTA	Pondweed (Potamogeton sp.)
RANU	Buttercup (Ranunculus sp.)
RUBU	Blackberry (Rubus sp.)
SALI	Willow (<i>Salix</i> sp.)
SAGI	Arrowhead or wapato (Sagittaria latifolia)
SCIR	Bullrush (Scirpus sp.)
SCOT	Scot's broom (Cytisus scoparius)
SOLA	Nightshade (Solanum sp.)
SPAR	Burr reed (Sparganium sp.)
ТҮРН	Cattail (<i>Typha</i> sp.)
ULTR	Bladderwort (Ultricularia sp.)
VALI	Tapegrass (Vallisneria sp.)
VERO	Speedwell (Veronica sp.)

³ Salmonid codes: CO= coho salmon *Oncorhynchus kisutch*; CH= chinook salmon

O. tshawytscha; CT= cutthroat trout O. clarki; RB= rainbow trout O. mykiss, TF= unknown trout fry.

⁴ Centrarchid codes: BG= bluegill *Lepomis macrochirus*; C= crappie *Pomoxis* spp., LB= largemouth bass *Micropterus salmoides*; SB= smallmouth bass *M. dolomieu*; PK= pumpkinseed *L. gibbosus, and* WM= warmouth *Chaenobryttus gulosus*.

COAST FORK WILLAMETTE RIVER BASIN

Site Name Basin	C. FORK SIDE CHAN COAST FORK WILLA			Map CodeCF11BSampling Date5/19/2004				
Subbasin	COAST FORK WILLA	WELLE RIVER		UTM 10T 498891	4857908			
Surface Area	a (m2)	9100		Native Fish Species Colle	cted:			
Average Dept	th (m)	0.8		Oregon Chub	185			
Water Tempe	erature (C)	16		Cottids	4			
Percent Silt /		50		Speckled Dace	107			
	-	00		Redside Shiners	16			
Types of aq	uatic vegetation ¹			Northern Pikeminnows	69			
Submerger	nt	15		Largescale Suckers	11			
Emergent		10		Sandrollers	3			
Floating				Threespine Sticklebacks Salmonids ³	90			
Algae								
	Total	25		Lamprey				
Aquatic Veg	getation (genera)			Non-native Fish Species (Collected:			
POTA		5		Western Mosquitofish				
MYRI		5		Centrarchids ⁴ BG PK	130			
GRAM		5		Bullheads	1			
ELOD		5		Common Carp				
SALI		5		Other: C	M			
			NOTE:	POPULATION ESTIMATE				
			NOTE.	POPULATION ESTIMATE				
Site Name	C FK ISLAND- WATI	ERHOUSE SLOUGH	NOTE.		F12			
	C FK ISLAND- WATI COAST FORK WILLA			Map Code Cl	F12 26/2004			
Basin			NOTE.	Map Code Cl				
Basin Subbasin	COAST FORK WILLA			Map Code Cl Sampling Date 5/2	26/2004 4854014			
Basin Subbasin Surface Area	COAST FORK WILLA	METTE RIVER	NOTE.	Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Collect	26/2004 4854014			
Site Name Basin Subbasin Surface Area Average Dept	COAST FORK WILLA a (m2) th (m)	METTE RIVER 3200 0.5		Map CodeClSampling Date5/2UTM10T496483	26/2004 4854014			
Basin Subbasin Surface Area Average Dept Water Tempe	COAST FORK WILLA a (m2) th (m) erature (C)	METTE RIVER 3200 0.5 16		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Collect Oregon Chub	26/2004 4854014 cted:			
Basin Subbasin Surface Area Average Dept Water Tempe	COAST FORK WILLA a (m2) th (m) erature (C)	METTE RIVER 3200 0.5		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids	26/2004 4854014 cted: 3			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt /	COAST FORK WILLA a (m2) th (m) erature (C)	METTE RIVER 3200 0.5 16		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids Speckled Dace	26/2004 4854014 cted: 3			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹	3200 0.5 16 40		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids Speckled Dace Redside Shiners	26/2004 4854014 cted: 3 25			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹	METTE RIVER 3200 0.5 16 40 75		Map CodeClSampling Date5/2UTM10T496483Native Fish Species CollerOregon ChubOregon ChubCottidsSpeckled DaceRedside ShinersNorthern PikeminnowsLargescale SuckersSandrollers	26/2004 4854014 cted: 3 25 2			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submergen Emergent	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹	3200 0.5 16 40		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	26/2004 4854014 cted: 3 25 2 1			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq u Submerger Emergent Floating	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹	METTE RIVER 3200 0.5 16 40 75		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ 3	26/2004 4854014 cted: 3 25 2 1			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submergen Emergent	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹ nt	METTE RIVER 3200 0.5 16 40 75 17		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	26/2004 4854014 cted: 3 25 2 1			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger Emergent Floating Algae	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹	METTE RIVER 3200 0.5 16 40 75		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ 3	26/2004 4854014 cted: 3 25 2 1 1			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger Emergent Floating Algae Aquatic Veg	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹ nt	METTE RIVER 3200 0.5 16 40 75 17 92		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collection	26/2004 4854014 cted: 3 25 2 1 1			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger Emergent Floating Algae Aquatic Veg SCIR	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹ nt	METTE RIVER 3200 0.5 16 40 75 17 92 5		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey	26/2004 4854014 cted: 3 25 2 1 1 1 Scollected:			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger Emergent Floating Algae Aquatic Veg SCIR GRAM	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹ nt	METTE RIVER 3200 0.5 16 40 75 17 92 5 5 5		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collection	26/2004 4854014 cted: 3 25 2 1 1 1 2 0 1 2 71			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger Emergent Floating Algae Aquatic Veg SCIR GRAM SALI	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹ nt	METTE RIVER 3200 0.5 16 40 75 17 92 5 5 2		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collection Western Mosquitofish Centrarchids ⁴ BG PK Bullheads State	26/2004 4854014 cted: 3 25 2 1 1 1 2 0 1 1 2 5 2 1 1 3 5			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger Emergent Floating Algae Aquatic Veg SCIR GRAM SALI MYRI	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹ nt	METTE RIVER 3200 0.5 16 40 75 17 92 5 5 2 40		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collection Western Mosquitofish Centrarchids ⁴ BG PK Bullheads Common Carp	26/2004 4854014 cted: 3 25 2 1 1 1 2 0 1 1 2 5 2 1 1 3 5			
Basin Subbasin Surface Area Average Dept Water Tempe Percent Silt / Types of aq Submerger Emergent Floating Algae Aquatic Veg SCIR GRAM SALI	COAST FORK WILLA a (m2) th (m) erature (C) Organics uatic vegetation ¹ nt	METTE RIVER 3200 0.5 16 40 75 17 92 5 5 2		Map Code Cl Sampling Date 5/2 UTM 10T 496483 Native Fish Species Coller Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collection Western Mosquitofish Centrarchids ⁴ BG PK Bullheads State	26/2004 4854014 cted: 3 25 2 1 1 1 2 0 1 1 2 5 2 1 1 3 5			

COAST FORK WILLAMETTE RIVER BASIN

	FORK BACK FORK WILLA	WATER RT- CF13 METTE RIVER	Map Code Sampling Date UTM 10T 4982	CF13 5/26/2004 201 4856036				
Surface Area (m2)		1600	Native Fish Species Collected:					
Average Depth (m)		0.5	Oregon Chub					
Water Temperature (C)	16	Cottids	8				
Percent Silt / Organic	S	100	Speckled Dace Redside Shiners	41 23				
Types of aquatic ve	egetation ¹		Northern Pikeminnows					
Submergent Emergent Floating Algae Total		45 15 5	Largescale Suckers Sandrollers Threespine Stickleb Salmonids ³ Lamprey					
Aquatic Vegetation			Non-native Fish Species Collected:					
SPAR LEMN POTA GRAM ELOD		10 5 25 5 20	Western Mosquito Centrarchids ⁴ BG Bullheads Common Carp Other:	ofish 23				
		NO	TE:					
		WATER LF- CF14	Map Code	CF14				

Basin COAST FORK WILLAMETTE RIVER	METTE RIVER	Sampling Date 5/26/20	04
Subbasin		UTM 10T 498245	4856340
Surface Area (m2)	3360	Native Fish Species Collected	:
Average Depth (m)	0.5	Oregon Chub	
Water Temperature (C)	14	Cottids	
Percent Silt / Organics	100	Speckled Dace Redside Shiners	73
Types of aquatic vegetation ¹		Northern Pikeminnows	32
Submergent Emergent Floating Algae Total	20 50 70	Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey	
Aquatic Vegetation (genera)		Non-native Fish Species Colle	cted:
SPAR ELOD	50 20 0	Western Mosquitofish Centrarchids ⁴ BG Bullheads Common Carp	31
		Other:	

NOTE:

COAST FORK WILLAMETTE RIVER BASIN

Site Name COAST FORK BACK Basin COAST FORK WILLAN Subbasin		Map Code CF15 Sampling Date 5/26/200 UTM 10T 498588 4	4 857930
Surface Area (m2)	900	Native Fish Species Collected:	
Average Depth (m)	0.7	Oregon Chub	
Water Temperature (C)	14	Cottids	
Percent Silt / Organics	100	Speckled Dace Redside Shiners	1 26
Types of aquatic vegetation ¹		Northern Pikeminnows	6
Submergent Emergent Floating Algae Total	35 40 2 77	Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey	2
Aquatic Vegetation (genera)		Non-native Fish Species Collect	ted:
SPAR ELOD POLY LEMN	40 15 20 2	Western Mosquitofish Centrarchids ⁴ BG Bullheads Common Carp	27
		Other:	

NOTE:

Site Name Basin	CAMAS SWALE COAST FORK WILLA	METTE RIVER	Map CodeCS1H*Sampling Date9/7/2004	
Subbasin	CAMAS SWALE		UTM 10T 494550 48635	675
Surface Are	ea (m2)	150	Native Fish Species Collected:	
Average De	pth (m)	0.2	Oregon Chub	
Water Temp	perature (C)	18	Cottids	
Percent Silt	/ Organics	90	Speckled Dace Redside Shiners	
Types of a	quatic vegetation ¹		Northern Pikeminnows	
Submerg Emergent Floating Algae		10 <u>10</u> 20	Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey	2
Aquatic Ve	egetation (genera)		Non-native Fish Species Collected:	
FILA GRAM		10 10	Western Mosquitofish Centrarchids ⁴ BG Bullheads Common Carp	79 21
			Other:	

NOTE:

COAST FORK WILLAMETTE RIVER BASIN

Site Name Basin	DORENA POND (SC COAST FORK WILLA			Map C Sampli	ode ing Date		DP1B 5/19/20	04
Subbasin	ROW RIVER			UTM	10T	503494	5/19/20	4847807
Surface Are	ea (m2)	2880		Native	e Fish S	pecies Co	ollected	:
Average De	pth (m)	0.4		Ore	gon Chul	D		
Water Temp		12		Cott	•			
				Spe	ckled Da	се		
Percent Silt	/ Organics	100		Red	lside Shii	ners		
Types of a	quatic vegetation ¹			Nor	thern Pi	keminnow	S	
Submerge	ent	35			gescale \$	Suckers		
Emergent		65			drollers			
Floating		0				Stickleback	S	
Algae		<u>0</u>			nonids ³			
-	Total	100		Lam	prey			
Aquatic Ve	egetation (genera)			Non-n	ative Fi	sh Specie	es Colle	cted:
SPAR		40		We	stern M	osquitofisl	า	
ELEO		20		Cei	ntrarchid	s ⁴ BG LB		14
SCIR		3		Bul	lheads			2
MYRI		15		Cor	mmon Ca	ırp		
ELOD		15		Other				
POLY		5						
0.41.1		2				~		
		TER	NOTE:	MERCU Map C	ode	JY	DP2	204
Site Name Basin	DORENA BACKWA COAST FORK WILL ROW RIVER	TER	NOTE:	Map C		503439	DP2 5/19/20	004 4847829
Site Name Basin Subbasin	COAST FORK WILLA ROW RIVER	TER	NOTE:	Map C Sampli UTM	ode ing Date 10T		5/19/20	4847829
Site Name Basin Subbasin Surface Are	COAST FORK WILL ROW RIVER	TER Amette River	NOTE:	Map C Sampli UTM Native	ode ing Date 10T	503439 pecies Co	5/19/20	4847829
Site Name Basin Subbasin Surface Are Average De	COAST FORK WILLA ROW RIVER ea (m2) pth (m)	TER AMETTE RIVER 4800	NOTE:	Map C Sampli UTM Native Orea	ode ing Date 10T e Fish S gon Chul ids	503439 pecies Co	5/19/20	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C)	TER AMETTE RIVER 4800 0.8	NOTE:	Map C Sampli UTM Native Ore Cott Spe	ode ing Date 10T Fish S gon Chul ids ckled Da	503439 pecies Co	5/19/20	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	COAST FORK WILL/ ROW RIVER ea (m2) pth (m) perature (C) / Organics	TER AMETTE RIVER 4800 0.8 12	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red	iode ing Date 10T e Fish S gon Chul ids ckled Da iside Shir	503439 pecies Co ce ners	5/19/20	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C)	TER AMETTE RIVER 4800 0.8 12	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nor	iode ing Date 10T e Fish S gon Chul ids ckled Da Iside Shii thern Pil	503439 pecies Co o ce ners keminnow	5/19/20	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	COAST FORK WILL/ ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	TER AMETTE RIVER 4800 0.8 12	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort	iode ing Date 10T e Fish S gon Chul ids ckled Da side Shii thern Pil gescale S	503439 pecies Co o ce ners keminnow	5/19/20	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	COAST FORK WILL/ ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	TER AMETTE RIVER 4800 0.8 12 70	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San	iode ing Date 10T e Fish S gon Chul ids ckled Da side Shit thern Pil gescale S drollers	503439 pecies Co ce ners keminnows Suckers	5/19/20 Dilected	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	COAST FORK WILL/ ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	TER AMETTE RIVER 4800 0.8 12 70 15	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San Thre	and Date 10T 2 Fish S gon Chul ids ckled Da side Shin thern Pil gescale S drollers bespine S	503439 pecies Co o ce ners keminnow	5/19/20 Dilected	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	COAST FORK WILLA ROW RIVER	TER AMETTE RIVER 4800 0.8 12 70 15 20	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San Thre Saln	iode ing Date 10T e Fish S gon Chul ids ckled Da side Shit thern Pil gescale S drollers	503439 pecies Co ce ners keminnows Suckers	5/19/20 Dilected	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent total	TER AMETTE RIVER 4800 0.8 12 70 15	NOTE:	Map C Sampli UTM Native Cott Spe Red Nort Larg San Thre Saln Lam	ang Date 10T 2 Fish S gon Chul ids ckled Da Iside Shirt thern Pil gescale S drollers sespine S nonids ³	503439 pecies Co ce hers keminnow: Suckers Stickleback	5/19/20 ollected	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae	COAST FORK WILLA ROW RIVER	TER AMETTE RIVER 4800 0.8 12 70 15 20	NOTE:	Map C Sampli UTM Native Cott Spe Red Nort Larg San Thre Saln Lam	ang Date 10T 2 Fish S gon Chul ids ckled Da Iside Shirt thern Pil gescale S drollers sespine S nonids ³	503439 pecies Co ce ners keminnows Suckers	5/19/20 ollected	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent total	TER AMETTE RIVER 4800 0.8 12 70 15 20	NOTE:	Map C Sampli UTM Native Oreg Cott Spe Red Nord Larg San Thre Saln Lam We	Fode ing Date 10T Fish S gon Chul ids ckled Da side Shin thern Pil gescale S drollers bespine S nonids ³ aprey hative Fi estern M	503439 pecies Co ce ners keminnows Suckers Stickleback sh Specie osquitofisl	5/19/20 billected	4847829 : ected:
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent total	TER AMETTE RIVER 4800 0.8 12 70 15 20 35	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Lar San Thre Saln Lar Non-n	and Date 10T 2 Fish S gon Chul ids ckled Da side Shirt thern Pil gescale S drollers bespine S nonids ³ aprey native Fi estern M ntrarchid	503439 pecies Co ce ners keminnows Suckers Stickleback sh Specie osquitofisl	5/19/20 billected	4847829
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent total	TER AMETTE RIVER 4800 0.8 12 70 15 20 35 35	NOTE:	Map C Sampli UTM Native Cott Spe Red Nord Larg San Thre Saln Lam We Cel Bul	and a part of the second secon	503439 pecies Co ce hers seminnows Stickleback sh Specie osquitofish s ⁴ BG	5/19/20 billected	4847829 : ected:
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve POLY ELOD	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent total	TER AMETTE RIVER 4800 0.8 12 70 15 20 35 35 5 5	NOTE:	Map C Sampli UTM Native Cott Spe Red Nord Larg San Thre Saln Lam We Cel Bul	and Date 10T 2 Fish S gon Chul ids ckled Da side Shirt thern Pil gescale S drollers bespine S nonids ³ aprey native Fi estern M ntrarchid	503439 pecies Co ce hers seminnows Stickleback sh Specie osquitofish s ⁴ BG	5/19/20 billected	4847829 : ected:
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve POLY ELOD MYRI	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent total	TER AMETTE RIVER 4800 0.8 12 70 15 20 15 20 35 35 5 5 5	NOTE:	Map C Sampli UTM Native Cott Spe Red Nord Larg San Thre Saln Lam We Cel Bul	and Date 10T 2 Fish S gon Chul ids ckled Da side Shirt thern Pil gescale S drollers bespine S nonids ³ aprey ative Fi estern M ntrarchid lheads mmon Ca	503439 pecies Co ce hers seminnows Stickleback sh Specie osquitofish s ⁴ BG	5/19/20 billected	4847829 : ected:

COAST FORK WILLAMETTE RIVER BASIN

Site Name	HERMAN POND			Map Code		LAYNG1D	
Basin	COAST FORK WILLA	METTE RIVER		Sampling Date		5/20/2004	
Subbasin	ROW RIVER			UTM 10T	525471	484	2030
Surface Are	ea (m2)	3240		Native Fish S	pecies Co	ollected:	
Average De	pth (m)	0.9		Oregon Chu	b		345
Water Temp	erature (C)	14		Cottids			
Percent Silt		100		Speckled Da			
	-			Redside Shi			
Types of a	quatic vegetation ¹			Northern P Largescale		S	
Submerge	ent	40		Sandrollers	Suckers		
Emergent		57		Threespine	Stickloback	· •	
Floating		2		Salmonids ³	SUCKIEDACK	.5	
Algae		<u>0</u>					
	Total	99		Lamprey			
Aquatic Ve	egetation (genera)			Non-native F	ish Specie	es Collected	1:
TYPH		50		Western M		n	
POTA		40		Centrarchic	ls ⁴		
SALI		5		Bullheads			
LEMN		2		Common C	arp		
JUNC		1		Other:			
				Other:			
CARE		1					
CARE Site Name	ROW RIVER BACKW	ATER LEFT ROW5	NOTE:	POPULATION E	ST- 2002 II	ROW5	0 FCSP
CARE Site Name Basin	ROW RIVER BACKW COAST FORK WILLA ROW RIVER	ATER LEFT ROW5	NOTE:	POPULATION E	ST- 2002 IN 497583	ROW5 5/26/2004	0 FCSP 8970
CARE Site Name Basin Subbasin	COAST FORK WILLA ROW RIVER	ATER LEFT ROW5	NOTE:	POPULATION E Map Code Sampling Date	497583	ROW5 5/26/2004 484	
CARE Site Name Basin Subbasin Surface Are	COAST FORK WILLA ROW RIVER	/ATER LEFT ROW5 METTE RIVER	NOTE:	POPULATION E Map Code Sampling Date UTM 10T	497583	ROW5 5/26/2004 484	
CARE Site Name Basin Subbasin Surface Are Average De	COAST FORK WILLA ROW RIVER ea (m2) pth (m)	ATER LEFT ROW5 METTE RIVER 540	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S	497583	ROW5 5/26/2004 484	
CARE Site Name Basin Subbasin Surface Are Average De Water Temp	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C)	ATER LEFT ROW5 METTE RIVER 540 0.8 13.5	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled D	497583 Species Co b ace	ROW5 5/26/2004 484	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics	ATER LEFT ROW5 METTE RIVER 540 0.8	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi	497583 pecies Co b ace ners	ROW5 5/26/2004 484	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C)	ATER LEFT ROW5 METTE RIVER 540 0.8 13.5	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P	497583 species Co b ace ners keminnows	ROW5 5/26/2004 484	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	ATER LEFT ROW5 METTE RIVER 540 0.8 13.5 100	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale	497583 species Co b ace ners keminnows	ROW5 5/26/2004 484	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	ATER LEFT ROW5 METTE RIVER 540 0.8 13.5	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers	497583 species Co b ace ners keminnows Suckers	ROW5 5/26/2004 484 bllected:	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	VATER LEFT ROW5 METTE RIVER 540 0.8 13.5 100 65	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine	497583 species Co b ace ners keminnows Suckers Stickleback	ROW5 5/26/2004 484 bllected:	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	VATER LEFT ROW5 METTE RIVER 540 0.8 13.5 100 65	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³	497583 species Co b ace ners keminnows Suckers Stickleback	ROW5 5/26/2004 484 bllected:	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	VATER LEFT ROW5 METTE RIVER 540 0.8 13.5 100 65	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine	497583 species Co b ace ners keminnows Suckers Stickleback	ROW5 5/26/2004 484 bllected:	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	VATER LEFT ROW5 METTE RIVER 540 0.8 13.5 100 65 20	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³	497583 Species Co b ace ners keminnows Suckers Stickleback	ROW5 5/26/2004 484 bllected:	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	ATER LEFT ROWS METTE RIVER 540 0.8 13.5 100 65 20 85	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³ Lamprey	497583 species Co b ace ners keminnows Suckers Stickleback	ROW5 5/26/2004 484 ollected:	8970
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve POLY	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	ATER LEFT ROWS METTE RIVER 540 0.8 13.5 100 65 20 85 85	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³ Lamprey	497583 species Co b ace ners keminnows Suckers Stickleback ish Specie	ROW5 5/26/2004 484 ollected:	8970 2
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve POLY ELOD	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	ATER LEFT ROW5 METTE RIVER 540 0.8 13.5 100 65 20 85 85 10 20	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³ Lamprey Non-native F Western M	497583 species Co b ace ners keminnows Suckers Stickleback ish Specie	ROW5 5/26/2004 484 ollected:	8970 2
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve POLY ELOD VALI	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	ATER LEFT ROWS METTE RIVER 540 0.8 13.5 100 65 20 85 85 10 20 5	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³ Lamprey Non-native F Western M Centrarchio Bullheads	497583 species Co b ace ners keminnows Suckers Stickleback ish Specie losquitofish Is ⁴	ROW5 5/26/2004 484 ollected:	8970 2
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve POLY ELOD VALI SPAR	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	ATER LEFT ROWS METTE RIVER 540 0.8 13.5 100 65 20 85 85 10 20 5 10	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³ Lamprey Non-native F Western M Centrarchic Bullheads Common C	497583 species Co b ace ners keminnows Suckers Stickleback ish Specie losquitofish Is ⁴	ROW5 5/26/2004 484 ollected:	8970 2
CARE Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve POLY ELOD VALI	COAST FORK WILLA ROW RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	ATER LEFT ROWS METTE RIVER 540 0.8 13.5 100 65 20 85 85 10 20 5	NOTE:	POPULATION E Map Code Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern P Largescale Sandrollers Threespine Salmonids ³ Lamprey Non-native F Western M Centrarchio Bullheads	497583 species Co b ace ners keminnows Suckers Stickleback ish Specie losquitofish Is ⁴	ROW5 5/26/2004 484 ollected:	8970 2

COAST FORK WILLAMETTE RIVER BASIN

Site Name	ROW RIVER SLOUG		Map Code ROW6	
Basin	COAST FORK WILLA	METTE RIVER	Sampling Date 5/26/20	-
Subbasin	ROW RIVER		UTM 10T 497757	4849785
Surface Are	ea (m2)	700	Native Fish Species Collected	:
Average De	pth (m)	0.7	Oregon Chub	
Water Temp	perature (C)	15	Cottids	2
Percent Silt	/ Organics	70	Speckled Dace	14
Types of aquatic vegetation ¹		Redside Shiners	32	
Types of a	quatic vegetation'		Northern Pikeminnows	90
Submerg	ent	40	Largescale Suckers Sandrollers	3
Emergent	İ.	11		
Floating			Threespine Sticklebacks Salmonids ³	
Algae			Lamprey	
	Total	51	Lampicy	
Aquatic Ve	egetation (genera)		Non-native Fish Species Colle	cted:
VALI		25	Western Mosquitofish	
GRAM		10	Centrarchids ⁴ BG C PK	18
ALIS		1	Bullheads	
POTA		10	Common Carp	
CALI		5	Other:	
		NO	TE:	
Site Name	ROW RIVER BW (BE	AVER PND) ROW7	Map Code ROW7	
Basin	COAST FORK WILLA	METTE RIVER	Sampling Date 5/26/20	004
Subbasin	ROW RIVER		UTM 10T 496735	4851510
Surface Are	ea (m2)	2625	Native Fish Species Collected	:
Average De	pth (m)	0.7	Oregon Chub	
Water Temp	perature (C)	18	Cottids	1
Percent Silt		100	Speckled Dace	
	·		Redside Shiners	
Types of a	quatic vegetation ¹		Northern Pikeminnows	
Submerg	ent	66	Largescale Suckers	
Emergent	t	25	Sandrollers	
Floating			Threespine Sticklebacks Salmonids ³	
Algae				
			Lamprey	

Total	
Aquatic Vegetation (genera)	
POLY	
POTA	
SPAR	
MYRI	

GRAM

SALI

Non-native Fish Species Collected:Western Mosquitofish123Centrarchids ⁴ BG12Bullheads12Common Carp12

Other:

Lamprey

NOTE:

91

60

1

5

10

5

10

LOWER WILLAMETTE RIVER BASIN

Site Name Basin	ANKENY NWR DUNLIN-WOO LOWER WILLAMETTE RIVER	DDUCK PND		Map Co Samplir			AN4-5G 5/27/2004	
Subbasin	ANKENY			UTM	10T	493369	49	57231
Surface Area	(m2)	6000		Native	Fish Sp	ecies Co	llected:	
Average Dept	th (m)	1.2		Oreg	jon Chub			
Water Tempe	rature (C)	17		Cotti	ds			
Percent Silt /		100		Spec	ckled Dad	ce		
	-	100		Reds	side Shin	ers		
Types of aq	uatic vegetation ¹					eminnows	5	
Submerger	nt			-	escale S	uckers		
Emergent		67			drollers			_
Floating		20				tickleback	S	3
Algae					ionids ³			
-	Total	87		Lam	prey			
Aquatic Veg	jetation (genera)			Non-na	ative Fis	sh Specie	s Collecte	ed:
GRAM		50		Wes	stern Mc	squitofish	1	
LEMN		20			trarchids			
ELEO		10		Bull	heads			
SCIR		5		Con	nmon Car	p.		
ALIS		2		Other:				
			NOTE:	PONDS	FULL AN	D CONNE	CTED	
Site Name	BEAVER CREEK			Map Co	ode		BEAV080	76*
Basin	LOWER WILLAMETTE RIVER			Samplir			10/5/2004	
Subbasin	MILL CREEK			UTM	10T	510583	49	66429
Surface Area	ı (m2)	788		Native	Fish Sp	ecies Co	llected:	
Average Dept	th (m)	0.4		Oreg	jon Chub			
Water Tempe		14		Cotti				3
				Spec	ckled Dad	ce		2
Percent Silt /	Organics	25			side Shin			54
Types of aq	uatic vegetation ¹			North	hern Pik	eminnows	;	15
Submerger	nt	0		Larg	escale S	uckers		1
Emergent	in a state of the	25			drollers			
Floating		0				tickleback	S	
Algae		0 <u>0</u>			nonids ³	CT		2
	Total	<u>0</u> 25		Lam	prey			
Aquatic Veg	jetation (genera)			Non-na	ative Fis	sh Specie	s Collecte	ed:
	,	25				squitofish		
GRAM		25			trarchids			
					heads			
					nmon Car	р		
				Other:				
			NOTE:				BUTMT MID	CDEEK

LOWER WILLAMETTE RIVER BASIN

Site Name				Map Code		BUDEAU1*	
Basin Subbasin	LOWER WILLAMETTE MILL CREEK	E KIVER		Sampling Date UTM 10T	503925	8/23/2004 4962925	
SUDDASIN					503925	4902920	
Surface Are	ea (m2)	0		Native Fish Sp	ecies Co	llected:	
Average De	pth (m)	0		Oregon Chub			
Water Temp	perature (C)			Cottids			
Percent Silt	/ Organics	100		Speckled Dad			
	quatic vegetation ¹			Redside Shin Northern Pik			
				Largescale S			
Submerge		0		Sandrollers	-		
Emergent		0		Threespine S	tickleback	3	
Floating		0		Salmonids ³			
Algae	-	<u>0</u>		Lamprey			
	Total	0					
Aquatic Ve	egetation (genera)			Non-native Fis			
				Western Mc			
				Centrarchids	*		
				Bullheads			
				Common Car	.b		
				Other:		NO FISH	
			NOTE:	POTENTIAL INTR	ODUCTION	I SITE- DRY	
Site Name	WEST FORK DAIRY	CREEK #2362		Map Code		DAIR02362*	
Basin	LOWER WILLAMETTE	RIVER		Sampling Date		10/11/2004	
Dasili					400047	5053800	
	TUALATIN RIVER			UTM 10T	490647	5055600	
Subbasin	-						
Subbasin Surface Are	ea (m2)	550		Native Fish Sp	ecies Co		
Subbasin Surface Are Average De	ea (m2) pth (m)	0.3		Native Fish Sp Oregon Chub	ecies Co	llected:	
Subbasin Surface Are Average De	ea (m2) pth (m)			Native Fish Sp Oregon Chub Cottids	ecies Co		
Subbasin Surface Are Average De Water Temp	ea (m2) pth (m) perature (C)	0.3		Native Fish Sp Oregon Chub Cottids Speckled Dad	pecies Co	llected: 9	
Subbasin Surface Are Average De Water Temp Percent Silt	ea (m2) pth (m) perature (C) / Organics	0.3 11.5		Native Fish Sp Oregon Chub Cottids	ecies Co	llected:	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	0.3 11.5 10		Native Fish Sp Oregon Chub Cottids Speckled Dao Redside Shin Northern Pik	pecies Co ce ers eminnows	llected: 9	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	0.3 11.5 10 0		Native Fish Sp Oregon Chub Cottids Speckled Dad Redside Shin Northern Pik Largescale S	pecies Co ce ers eminnows	llected: 9	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	0.3 11.5 10		Native Fish Sp Oregon Chub Cottids Speckled Dad Redside Shin Northern Pik Largescale S Sandrollers	ecies Co ce ers eminnows uckers	llected: 9 64	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	0.3 11.5 10 0 5 0		Native Fish Sp Oregon Chub Cottids Speckled Dao Redside Shin Northern Pik Largescale S Sandrollers Threespine S	pecies Co ce ers eminnows uckers ticklebacks	llected: 9 64	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	ea (m2) pth (m) berature (C) / Organics quatic vegetation ¹ ent	0.3 11.5 10 0 5 0 <u>0</u>		Native Fish Sp Oregon Chub Cottids Speckled Dao Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³	ecies Co ce ers eminnows uckers	llected: 9 64	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.3 11.5 10 0 5 0		Native Fish Sp Oregon Chub Cottids Speckled Dao Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	ecies Co ers eminnows uckers ticklebacks CT	llected: 9 64	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ea (m2) pth (m) berature (C) / Organics quatic vegetation ¹ ent	0.3 11.5 10 0 5 0 <u>0</u>		Native Fish Sp Oregon Chub Cottids Speckled Dao Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³	ecies Co ers eminnows uckers ticklebacks CT	llected: 9 64	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.3 11.5 10 0 5 0 <u>0</u>		Native Fish Sp Oregon Chub Cottids Speckled Dao Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	ecies Co ers eminnows uckers ticklebacks CT	llected: 9 64 2 s Collected:	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.3 11.5 10 0 5 0 <u>0</u> 5		Native Fish Sp Oregon Chub Cottids Speckled Dad Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	ecies Co ers eminnows uckers ticklebacks CT sh Specie	llected: 9 64 2 s Collected:	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.3 11.5 10 0 5 0 <u>0</u> 5		Native Fish Sp Oregon Chub Cottids Speckled Dad Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Mo	ecies Co ers eminnows uckers ticklebacks CT sh Specie	llected: 9 64 2 s Collected:	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.3 11.5 10 0 5 0 <u>0</u> 5		Native Fish Sp Oregon Chub Cottids Speckled Dad Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Mo Centrarchids	ecies Co ers eminnows uckers ticklebacks CT sh Specie	llected: 9 64 2 s Collected:	
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.3 11.5 10 0 5 0 <u>0</u> 5		Native Fish Sp Oregon Chub Cottids Speckled Dao Redside Shin Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Mo Centrarchids Bullheads	ecies Co ers eminnows uckers ticklebacks CT sh Specie	llected: 9 64 2 s Collected:	

LOWER WILLAMETTE RIVER BASIN

Site Name Basin	EAST FORK DAIRY C		Map Code Sampling Date		DAIR02366* 10/11/2004
Subbasin	TUALATIN RIVER		UTM 10T	496007	5050282
Surface Are	a (m2)	600	Native Fish Sp	ecies Col	lected:
Average De	pth (m)	0.7	Oregon Chub		
Water Temp	erature (C)	11.5	Cottids		9
Percent Silt		5	Speckled Dac	е	1
	-	Ū	Redside Shine		21
Types of a	quatic vegetation ¹		Northern Pike		
Submerge	ent	0	Largescale Su Sandrollers	JCKErS	
Emergent		5	Threespine St	icklobacks	
Floating		0	Salmonids ³	CT	3
Algae		<u>0</u>	Lamprey	51	0
	Total	5			
Aquatic Ve	getation (genera)		Non-native Fis	h Specie	s Collected:
GRAM		5	Western Mos Centrarchids Bullheads Common Car	4	
			Other:		
Basin	WEST FORK DAIRY		Map Code Sampling Date		DAIR02672* 10/11/2004
Basin				484580	
Basin Subbasin	LOWER WILLAMETTE TUALATIN RIVER		Sampling Date	484580	10/11/2004 5058733
Basin Subbasin Surface Are	LOWER WILLAMETTE TUALATIN RIVER a (m2)	RIVER	 Sampling Date UTM 10T	484580	10/11/2004 5058733
Basin Subbasin Surface Are Average De	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m)	RIVER	 Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids	484580 ecies Col	10/11/2004 5058733
Basin Subbasin Surface Are Average De Water Temp	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C)	RIVER 399 0.4	Sampling Date UTM 10T Native Fish Spo Oregon Chub Cottids Speckled Dac	484580 ecies Col	10/11/2004 5058733 lected: 36 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C)	RIVER 399 0.4 10.5	Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike	484580 ecies Col e e ers eminnows	10/11/2004 5058733 lected: 36
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹	RIVER 399 0.4 10.5 10	 Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su	484580 ecies Col e e ers eminnows	10/11/2004 5058733 lected: 36 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	RIVER 399 0.4 10.5 10 0	Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers	484580 ecies Col e ers eminnows uckers	10/11/2004 5058733 lected: 36 1 28
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	RIVER 399 0.4 10.5 10	 Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St	484580 ecies Col e ers eminnows uckers	10/11/2004 5058733 lected: 36 1 28
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	RIVER 399 0.4 10.5 10 0 5 0	Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³	484580 ecies Col e ers eminnows uckers	10/11/2004 5058733 lected: 36 1 28
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	RIVER 399 0.4 10.5 10 0 5	Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St	484580 ecies Col e ers eminnows uckers	10/11/2004 5058733 lected: 36 1 28
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE TUALATIN RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	RIVER 399 0.4 10.5 10 0 5 0 0 2	Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³	484580 ecies Col e ers eminnows uckers icklebacks	10/11/2004 5058733 lected: 36 1 28
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	RIVER 399 0.4 10.5 10 0 5 0 0 2	Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey	484580 ecies Col ers eminnows uckers icklebacks h Species squitofish	10/11/2004 5058733 lected: 36 1 28
Submerge Emergent Floating Algae	LOWER WILLAMETTE TUALATIN RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	RIVER 399 0.4 10.5 10 0 5 0 0 5 0 0 5 5	Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mor Centrarchids Bullheads	484580 ecies Col ers eminnows uckers icklebacks h Species squitofish	10/11/2004 5058733 lected: 36 1 28

Site Name				Map Code		DAIR02673*	
Basin Subbasin	LOWER WILLAMETTI TUALATIN RIVER	ERIVER		Sampling Date UTM 10T	485847	10/11/2004 5057789	
Subbasin	TOALATIN RIVER				403047	3037789	
Surface Area	a (m2)	696		Native Fish Sp	oecies Co	llected:	
Average Dep	oth (m)	0.4		Oregon Chub)		
Water Temp	erature (C)	11		Cottids			8
Percent Silt /	Organics	10		Speckled Da		_	_
	quatic vegetation ¹			Redside Shir Northern Pik		2	5
Types of ac	qualic vegetation			Largescale S			3
Submerge	ent	0		Sandrollers	adicerto		0
Emergent		2		Threespine S	tickleback	\$	
Floating		0		Salmonids ³			1
Algae		<u>0</u>		Lamprey	01		
	Total	2		Lampley			
Aquatic Ve	getation (genera)			Non-native Fig	sh Specie	s Collected:	
GRAM		2		Western Mo		I.	
		-		Centrarchids	s ⁴		
				Bullheads			
				Common Ca	rp		
				Other:			
			NOTE:	ODOT- SALMON	IID HABITA	AT	
Site Name	GOOSENECK CREE	K #2015		Map Code		GOOS02015*	
Basin	LOWER WILLAMETT	E RIVER		Sampling Date		10/6/2004	
Subbasin	YAMHILL RIVER			UTM 10T	466162	4985508	
Surface Area	a (m2)	243		Native Fish Sp	oecies Co	llected:	
Average Dep	oth (m)	0.2		Oregon Chub)		
Water Temp		14.5		Cottids			6
	. ,	-		Speckled Da	се		
Percent Silt /	Organics	20		Redside Shir			
Types of ac	quatic vegetation ¹			Northern Pik		i	
Submerge	ant	2		Largescale S	luckers		
Emergent	211	0		Sandrollers			
Floating		0		Threespine S	tickleback	S	
_				Salmonids ³	CO CT U	л	4
Algae	Total	<u>0</u> 2		Lamprey			
A munitice Ma		2		Non watting Th	h Crest		
Aquatic Ve	getation (genera)			Non-native Fig			
POLY		2		Western Mo		l	
				Centrarchide	S [*]		
				Bullheads			
				Common Ca	rp		
				Other:			

Site Name		_		Map Code		HAYD	
Basin	LOWER WILLAMETTE RIVE	۲		Sampling D		10/4/2	
Subbasin	RICKREALL CREEK			UTM 10	487099)	4971301
Surface Are	ea (m2)	4680		Native Fis	h Species C	ollected	d:
Average De	pth (m)	1		Oregon	Chub		
Water Temp	erature (C)	15		Cottids			
Percent Silt	/ Organics	95		Speckle			
	quatic vegetation ¹			Redside Northerr	Shiners Pikeminnow	/S	1
					ale Suckers		·
Submerge		55		Sandroll			
Emergent		10			ine Sticklebac	ks	157
Floating		30		Salmonio			
Algae		<u>5</u>		Lamprey			
	Total	100					
Aquatic Ve	getation (genera)			Non-nativ	e Fish Speci	ies Coll	ected:
NUPH		20			n Mosquitofis		47
GRAM		10			chids ⁴ BG LE	3	3
MYRI		10		Bullhea			3
LEMN		10		Commo	n Carp		
CHAR		15		Other:			
ELOD		20					
POLY		5	NOTE:	PROPOSED	GRAVEL OPE	ERATION	l
O' N							00407*
Site Name Basin		5		Map Code	lato		.08197*
	LOWER WILLAMETTE RIVE	1		Sampling D UTM 10		10/11/	
Subbasin				UTM 10	525200		5036075
Surface Are	a (m2)			Native Fis	h Species C	ollected	d:
Average De	pth (m)			Oregon	Chub		
Water Temp	erature (C)			Cottids			
Percent Silt		0		Speckle			
. sroom on	, e.gamoo	v		Redside			
				Northerr	Pikeminnow	/S	
Types of a	quatic vegetation ¹						
		0			ale Suckers		
Submerge	ent	0		Largesc Sandroll	ers		
Submerge Emergent	ent	0		Largesc Sandroll Threesp	ers ine Sticklebac	ks	
Submerge Emergent Floating	ent	0 0		Largesc Sandroll	ers ine Sticklebac	ks	
Submerge Emergent	ent	0 0 <u>0</u>		Largesc Sandroll Threesp	ers ine Sticklebac ds ³	ks	
Submerge Emergent Floating Algae	Total	0 0		Largesc Sandroll Threesp Salmonic Lamprey	ers ine Sticklebac ds ³		ected:
Submerge Emergent Floating Algae	ent	0 0 <u>0</u>		Largesc Sandroll Threesp Salmonid Lamprey Non-nativ	ers ine Sticklebac ds ³ e Fish Spec i	ies Coll	ected:
Submerge Emergent Floating Algae	Total	0 0 <u>0</u>		Largesc Sandroll Threesp Salmonid Lamprey Non-nativ Wester	ers ine Sticklebac ds ³ e Fish Spec i n Mosquitofis	ies Coll	ected:
Submerge Emergent Floating Algae	Total	0 0 <u>0</u>		Largesc Sandroll Threesp Salmonid Lamprey Non-nativ Wester Centrar	ers ine Sticklebac ds ³ e Fish Spec i n Mosquitofis chids ⁴	ies Coll	ected:
Submerge Emergent Floating Algae	Total	0 0 <u>0</u>		Largesc Sandroll Threesp Salmonia Lamprey Non-nativ Wester Centrar Bullhea	ers ine Sticklebac ds ³ e Fish Spec i n Mosquitofis chids ⁴ ds	ies Coll	ected:
Submerge Emergent Floating Algae	Total	0 0 <u>0</u>		Largesc Sandroll Threesp Salmonid Lamprey Non-nativ Wester Centrar	ers ine Sticklebac ds ³ e Fish Spec i n Mosquitofis chids ⁴ ds	ies Coll	ected:

Site Name	MCKAY CREEK #23			Map C			MCKAY2365*
Basin Subbasin		RIVER		Sampi UTM	ing Date	501271	10/11/2004
Subbasin	TUALATIN RIVER			UTIVI	101	501271	5047820
Surface Are	ea (m2)	720		Nativ	e Fish S	pecies Co	ollected:
Average De	pth (m)	0.9		Ore	gon Chu	b	
Water Temp	erature (C)	11		Cot	tids		3
Percent Silt		5			eckled Da		
	-	0			lside Shi		12
Types of a	quatic vegetation ¹					keminnow	S
Submerge	ent	0			gescale : idrollers	Suckers	
Emergent		2				Stickleback	
Floating		0			nonids ³	SUCKIEDACI	.5
Algae		<u>0</u>			nprey		
	Total	2		Lan	ipiey		
Aquatic Ve	egetation (genera)			Non-r	native Fi	sh Speci	es Collected:
GRAM		2				osquitofis	า
				Ce	ntrarchid	s ⁴	
				Bu	llheads		
				Co	mmon Ca	arp	
				Other	:		
			NOTE:	ODOT	BRIDGE	SITE, LOW	GRAD SALM HABITAT
Site Name	MILL CREEK (YAMH	IILL) #1756	NOTE:	ODOT Map C		SITE, LOW	GRAD SALM HABITAT
	MILL CREEK (YAM) LOWER WILLAMETTE		NOTE:	Map C		SITE, LOW	
Basin	•		NOTE:	Map C Sampl	Code	SITE, LOW 466985	MILL01756*
Basin Subbasin	LOWER WILLAMETTE YAMHILL RIVER		NOTE:	Map C Sampl UTM	Code ing Date 10T		MILL01756* 10/6/2004 4984772
Basin Subbasin Surface Are	LOWER WILLAMETTE YAMHILL RIVER	RIVER	NOTE:	Map C Sampl UTM Native	Code ing Date 10T	466985 pecies Co	MILL01756* 10/6/2004 4984772
Basin Subbasin Surface Are Average De	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m)	3157 0.5	NOTE:	Map C Sampl UTM Native	Code ing Date 10T e Fish S gon Chu	466985 pecies Co	MILL01756* 10/6/2004 4984772
Basin Subbasin Surface Are Average De Water Temp	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C)	3157 0.5 14	NOTE:	Map C Sampl UTM Native Ore Cott	Code ing Date 10T e Fish S gon Chu	466985 pecies Co	MILL01756* 10/6/2004 4984772
Basin Subbasin Surface Are Average De Water Temp	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C)	3157 0.5	NOTE:	Map C Sampl UTM Native Ore Cott	Code ing Date 10T e Fish S gon Chu tids	466985 pecies Co b	MILL01756* 10/6/2004 4984772 Dilected:
Basin Subbasin Surface Are Average De Water Temp Percent Silt	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C)	3157 0.5 14	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi	466985 pecies Co b	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	3157 0.5 14 5	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi	466985 pecies Co b ace ners keminnow	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3157 0.5 14 5 0	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale s idrollers	466985 pecies Co b ace ners keminnow Suckers	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3157 0.5 14 5 0 2	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale s idrollers eespine s	466985 pecies Co b ace ners keminnow	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3157 0.5 14 5 0 2 0	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale s idrollers	466985 pecies Co b ace ners keminnow Suckers	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3157 0.5 14 5 0 2 0 <u>0</u>	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale s idrollers eespine s	466985 pecies Co b ace ners keminnow Suckers	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE YAMHILL RIVER	3157 0.5 14 5 0 2 0	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thru Salr Larg	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale s idrollers eespine s nonids ³	466985 pecies Co b ace ners keminnow Suckers Stickleback	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3157 0.5 14 5 0 2 0 2 0 2	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale S idrollers eespine S nonids ³ nprey	466985 pecies Co b ace ners keminnow Suckers Stickleback	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17 5 5 5 5 5 5 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE YAMHILL RIVER	3157 0.5 14 5 0 2 0 <u>0</u>	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale S idrollers eespine S monids ³ nprey native Fi estern M	466985 pecies Co b ace ners keminnow Suckers Stickleback sh Specio osquitofis	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17 5 5 5 5 5 5 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE YAMHILL RIVER	3157 0.5 14 5 0 2 0 2 0 2	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg Salr Larg	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale S idrollers eespine S nonids ³ nprey native Fi estern M ntrarchid	466985 pecies Co b ace ners keminnow Suckers Stickleback sh Specio osquitofis	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17 5 5 5 5 5 5 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE YAMHILL RIVER	3157 0.5 14 5 0 2 0 2 0 2	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Lar Salr Lar Salr Ce Bu	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale S idrollers eespine S nonids ³ nprey hative Fi estern M ntrarchid llheads	466985 pecies Co b ace ners keminnow Suckers Stickleback sh Specie osquitofist s ⁴	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17 5 5 5 5 5 5 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETTE YAMHILL RIVER	3157 0.5 14 5 0 2 0 2 0 2	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Lar Salr Lar Salr Ce Bu	Code ing Date 10T e Fish S gon Chu tids eckled Da dside Shi thern Pi gescale S idrollers eespine S nonids ³ nprey native Fi estern M ntrarchid llheads mmon Ca	466985 pecies Co b ace ners keminnow Suckers Stickleback sh Specie osquitofist s ⁴	MILL01756* 10/6/2004 4984772 Dilected: 4 10 17 5 5 5 5 5 5 5 5 5 5 5 5 5

	MILL CREEK			Map Code	MILL08070*
Basin	LOWER WILLAMETTE I	RIVER		Sampling Date	10/5/2004
Subbasin	MILL CREEK			UTM 10T 51685	7 4962210
Surface Area	a (m2)	450		Native Fish Species (Collected:
Average Dep	oth (m)	0.3		Oregon Chub	
Water Temp	erature (C)	14		Cottids	6
Percent Silt /		100		Speckled Dace	1
	-			Redside Shiners	83
Types of ac	quatic vegetation ¹			Northern Pikeminnov	
Submerge	ent	0		Largescale Suckers Sandrollers	1
Emergent		5		Threespine Stickleba	
Floating		0		Salmonids ³	585
Algae		<u>0</u>			
	Total	5		Lamprey	
Aquatic Ve	getation (genera)			Non-native Fish Spec	ies Collected:
GRAM		5		Western Mosquitofi	sh
		-		Centrarchids ⁴	
				Bullheads	
				Common Carp	
				Other:	
			NOTE:	ODOT- LOW GRADIENT,	MODERATE FLOW
Site Name	ROCK CREEK #01439			Map Code Sampling Date	ROCK01439* 10/11/2004
Basin LOWER WILLAMETTE RIVER		RIVER		Sampling Date	
	CLACKAMAS RIVER			UTM 10T 50127:	
Subbasin Surface Area		495			3 5047822
Subbasin	a (m2)			UTM 10T 50127:	3 5047822
Subbasin Surface Area Average Dep	a (m2) oth (m)	495		UTM 10T 501273	3 5047822
Subbasin Surface Area Average Dep Water Tempo	a (m2) oth (m) erature (C)	495 0.2 11		UTM 10T 501273 Native Fish Species C Oregon Chub	3 5047822 Collected:
Subbasin Surface Area Average Dep Water Tempo Percent Silt /	a (m2) oth (m) erature (C) / Organics	495 0.2		UTM 10T 501273 Native Fish Species O Oregon Chub Cottids	3 5047822 Collected:
Subbasin Surface Area Average Dep Water Tempo Percent Silt /	a (m2) oth (m) erature (C)	495 0.2 11		UTM 10T 501273 Native Fish Species (Oregon Chub Cottids Speckled Dace	3 5047822 Collected: 4
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac	a (m2) oth (m) erature (C) / Organics quatic vegetation ¹	495 0.2 11 10		UTM 10T 501273 Native Fish Species (Oregon Chub Cottids Speckled Dace Redside Shiners	3 5047822 Collected: 4
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers	3 5047822 Collected: 4
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0		UTM 10T 501273 Native Fish Species (Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebad	3 5047822 Collected: 4
Subbasin Surface Area Average Dep Nater Tempo Percent Silt / Types of ac Submerge Emergent Floating	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers	3 5047822 Collected: 4
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0		UTM 10T 501273 Native Fish Species (Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebad	3 5047822 Collected: 4 ws
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent Floating Algae	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0 0 0 0 0		UTM 10T 501273 Native Fish Species (Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebac Salmonids ³ CT Lamprey	3 5047822 Collected: 4 ws cks 3
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent Floating Algae	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0 0 0 0 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebar Salmonids ³ CT Lamprey Non-native Fish Spec	3 5047822 Collected: 4 ws cks 3 ies Collected:
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent Floating Algae	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0 0 0 0 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebar Salmonids ³ CT Lamprey Non-native Fish Spec Western Mosquitofi	3 5047822 Collected: 4 ws cks 3 ies Collected:
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent Floating Algae	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0 0 0 0 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebad Salmonids ³ CT Lamprey Non-native Fish Spec Western Mosquitofi Centrarchids ⁴	3 5047822 Collected: 4 ws cks 3 ies Collected:
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent Floating Algae	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0 0 0 0 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebac Salmonids ³ CT Lamprey Non-native Fish Spec Western Mosquitofi Centrarchids ⁴ Bullheads	3 5047822 Collected: 4 ws cks 3 ies Collected:
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent Floating Algae	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0 0 0 0 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebad Salmonids ³ CT Lamprey Non-native Fish Spec Western Mosquitofi Centrarchids ⁴ Bullheads Common Carp	3 5047822 Collected: 4 ws cks 3 ies Collected:
Subbasin Surface Area Average Dep Water Tempo Percent Silt / Types of ac Submerge Emergent Floating Algae	a (m2) oth (m) erature (C) / Organics quatic vegetation¹ ent	495 0.2 11 10 0 0 0 0 0 0 0		UTM 10T 501273 Native Fish Species C Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnov Largescale Suckers Sandrollers Threespine Sticklebac Salmonids ³ CT Lamprey Non-native Fish Spec Western Mosquitofi Centrarchids ⁴ Bullheads	3 5047822 Collected: 4 ws cks 3 ies Collected:

Site Name Basin	ROGUE RIVER (YAN LOWER WILLAMETTE	-		Map Code Sampling Da	ate	ROG04573* 10/6/2004	
Subbasin	YAMHILL RIVER			UTM 10T		498961	12
Surface Are	ea (m2)	833		Native Fish	n Species Co	ollected:	
Average De		0.6		Oregon C			
-				Cottids			4
Water Temp		14		Speckled	Dace		1
Percent Silt	/ Organics	20		Redside S			
Types of a	quatic vegetation ¹			Northern	Pikeminnow	S	
Submerg	ent	0		Largesca	le Suckers		
Emergent		2		Sandrolle			
Floating		0			ne Stickleback		
Algae		<u>0</u>		Salmonide	s ³ CO CT=	:1	42
5	Total	2		Lamprey			
Aquatic Ve	egetation (genera)			Non-native	Fish Specie	es Collected:	
GRAM		2		Western Centrarc Bullhead Common	S	n	
				Other:			
			NOTE:	ODOT- SALM	IONID HABIT	AT W/ LWD	
Site Name Basin	SALT CREEK (YAMI LOWER WILLAMETTE			Map Code Sampling Da	ate	SALT02001 * 10/6/2004	
Subbasin	YAMHILL RIVER			UTM 10T	472049	498258	31
Surface Are	ea (m2)	270		Native Fish	n Species Co	ollected:	
		270 0.25		Native Fish Oregon C		ollected:	
Average De	pth (m)	0.25				ollected:	11
Average De Water Temp	pth (m) perature (C)	0.25 15		Oregon C	hub	ollected:	11
Average De Water Temp	pth (m) perature (C)	0.25		Oregon C Cottids	Chub	ollected:	11 23
Average De Water Temp Percent Silt	pth (m) perature (C)	0.25 15		Oregon C Cottids Speckled Redside S	Chub		
Average De Water Temp Percent Silt Types of a	pth (m) perature (C) / Organics quatic vegetation ¹	0.25 15 5		Oregon C Cottids Speckled Redside S Northern Largesca	Chub Dace Shiners Pikeminnows Ile Suckers		23
Average De Water Temp Percent Silt Types of a Submerg	pth (m) perature (C) / Organics quatic vegetation¹ ent	0.25 15 5 0		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle	Dace Shiners Pikeminnows Ile Suckers ers	S	23
Average De Water Temp Percent Silt Types of a Submerg Emergent	pth (m) perature (C) / Organics quatic vegetation¹ ent	0.25 15 5		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir	Dace Shiners Pikeminnowa Ile Suckers ers he Stickleback	S	23 46
Average De Water Temp Percent Silt Types of a Submerg	pth (m) perature (C) / Organics quatic vegetation¹ ent	0.25 15 5 0 2 0		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids	Dace Shiners Pikeminnowa Ile Suckers ers he Stickleback	S	23
Average De Water Temp Percent Silt Types of a Submerg Emergent Floating	pth (m) perature (C) / Organics quatic vegetation¹ ent	0.25 15 5 0 2		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir	Dace Shiners Pikeminnowa Ile Suckers ers he Stickleback	S	23 46
Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	pth (m) perature (C) / Organics quatic vegetation ¹ ent	0.25 15 5 0 2 0 <u>0</u>		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey	Chub Dace Shiners Pikeminnowa Ile Suckers ars ne Stickleback s ³ RB	S	23 46
Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.25 15 5 0 2 0 0 2 2		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey	Chub Dace Shiners Pikeminnowa Ile Suckers ars ne Stickleback s ³ RB	s ss es Collected:	23 46
Submerg Emergent Floating Algae	pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.25 15 5 0 2 0 <u>0</u>		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey	Chub Dace Shiners Pikeminnowa Ile Suckers ers he Stickleback s ³ RB Fish Specie Mosquitofisl	s ss es Collected:	23 46
Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.25 15 5 0 2 0 0 2 2		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey Non-native Western	Chub Dace Shiners Pikeminnow Ile Suckers Prs he Stickleback s ³ RB Fish Specie Mosquitofish chids ⁴	s ss es Collected:	23 46
Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.25 15 5 0 2 0 0 2 2		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey Non-native Western Centrarc	Chub Dace Shiners Pikeminnowa Ile Suckers Srs De Stickleback s ³ RB Fish Specie Mosquitofish hids ⁴	s ss es Collected:	23 46
Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	0.25 15 5 0 2 0 0 2 2		Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey Non-native Western Centrarc Bullhead	Chub Dace Shiners Pikeminnowa Ile Suckers Srs De Stickleback s ³ RB Fish Specie Mosquitofish hids ⁴	s ss es Collected:	23 46

Site Name ST. PAUL PONDS (1	-		Map Code		STPAUL1
Basin LOWER WILLAMETT	E RIVER		Sampling Date		5/25/2004
Subbasin			UTM 10T	500165	5008900
Surface Area (m2)	3000		Native Fish Sp	ecies Co	llected:
Average Depth (m)	0		Oregon Chub		
Water Temperature (C)			Cottids		
Percent Silt / Organics	100		Speckled Dac	е	
-	100		Redside Shine		
Types of aquatic vegetation ¹			Northern Pike		
Submergent	5		Largescale Su	ickers	
Emergent	95		Sandrollers		
Floating			Threespine St Salmonids ³	ICKIEDACK	5
Algae					
Total	100		Lamprey		
Aquatic Vegetation (genera)			Non-native Fis	h Specie	s Collected:
GRAM	90		Western Mo		
ΡΟΤΑ	5		Centrarchids	4	
TYPH	5		Bullheads		
			Common Car	C	
			Other:		NO FISH
		NOTE:	POTENTIAL REIN	RODUCT	ION SITE
Site Name SOUTH YAMHILL R	IVER #0745		Map Code		SYAM00745*
			Map Code Sampling Date		SYAM00745 * 10/6/2004
Basin LOWER WILLAMETT				456206	
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER			Sampling Date		10/6/2004 4989639
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2)	'E RIVER		Sampling Date UTM 10T		10/6/2004 4989639
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m)	E RIVER 2253 0.5		Sampling Date UTM 10T Native Fish Sp		10/6/2004 4989639
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C)	E RIVER 2253 0.5 13		Sampling Date UTM 10T Native Fish Sp Oregon Chub	ecies Co	10/6/2004 4989639
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C)	E RIVER 2253 0.5		Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids	ecies Co	10/6/2004 4989639 Ilected:
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics	E RIVER 2253 0.5 13		Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac	ecies Co e ers	10/6/2004 4989639 Ilected: 7
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹	2253 0.5 13 5		Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su	ecies Co e ers eminnows	10/6/2004 4989639 Ilected: 7 18
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent	2253 0.5 13 5 0		Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers	ecies Co e ers eminnows uckers	10/6/2004 4989639 Ilected: 7 18 108 3
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent	E RIVER 2253 0.5 13 5 0 5		Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St	ecies Co e ers eminnows uckers	10/6/2004 4989639 Ilected: 7 18 108 3
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating	E RIVER 2253 0.5 13 5 0 5 0		Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St Salmonids ³	ecies Co e ers eminnows uckers	10/6/2004 4989639 Ilected: 7 18 108 3
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent	E RIVER 2253 0.5 13 5 0 5		Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St	ecies Co e ers eminnows uckers	10/6/2004 4989639 Ilected: 7 18 108 3
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total	E RIVER 2253 0.5 13 5 0 5 0 0 5 0 0 <u>0</u>		Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St Salmonids ³	ecies Co e ers eminnows uckers icklebacks	10/6/2004 4989639 Ilected: 7 18 108 3
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³)	E RIVER 2253 0.5 13 5 0 0 5 0 0 5 5		Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St Salmonids ³ Lamprey	ecies Co e ers eminnows uckers icklebacks h Specie	10/6/2004 4989639 Ilected: 7 18 108 3 3 5 5 5
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) GRAM	E RIVER 2253 0.5 13 5 0 0 5 0 0 5 3		Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St Salmonids ³ Lamprey	ecies Co e ers eminnows uckers icklebacks h Specie squitofish	10/6/2004 4989639 Ilected: 7 18 108 3 3 5 5 5
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³)	E RIVER 2253 0.5 13 5 0 0 5 0 0 5 5		Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mot	ecies Co e ers eminnows uckers icklebacks h Specie squitofish	10/6/2004 4989639 Ilected: 7 18 108 3 3 5 5 5
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) GRAM	E RIVER 2253 0.5 13 5 0 0 5 0 0 5 3		Sampling Date UTM 10T Native Fish Spe Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mos Centrarchids	ecies Co ers eminnows uckers icklebacks h Specie squitofish	10/6/2004 4989639 Ilected: 7 18 108 3 3 5 5 5
Basin LOWER WILLAMETT Subbasin YAMHILL RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) GRAM	E RIVER 2253 0.5 13 5 0 0 5 0 0 5 3		Sampling Date UTM 10T Native Fish Spr Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale Su Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mor Centrarchids Bullheads	ecies Co ers eminnows uckers icklebacks h Specie squitofish	10/6/2004 4989639 Ilected: 7 18 108 3 3 5 5 5

Site Name Basin	LOWER WILLAMETT	IVER #1612 F RIVER		Map C Sampli	ode ing Date		SYAM01612* 10/6/2004
Subbasin	YAMHILL RIVER			UTM	10T	452655	4989421
Surface Are	ea (m2)	1029		Native	e Fish S	pecies Co	llected:
Average De	pth (m)	1.2		Ore	gon Chul	b	
Water Temp		13		Cott	•		2
				Spe	ckled Da	ace	35
Percent Silt	/ Organics	50		Red	lside Shii	ners	
Types of a	quatic vegetation ¹			Nor	thern Pi	keminnows	12
Submerge	ent	0		-	gescale \$	Suckers	1
Emergent		5			drollers		
Floating		0				Stickleback	S
Algae		<u>0</u>			nonids ³		
0	Total	5		Lam	prey		
Aquatic Ve	egetation (genera)			Non-n	ative Fi	sh Specie	s Collected:
GRAM		3		We	stern M	osquitofish	1
CARE		2		Ce	ntrarchid	s ⁴	
O/ II L		-		Bul	lheads		
				Co	mmon Ca	arp	
				Other	:		
			NOTE:	old BF	RIDGE AE	BUTMENTS	SAMPLE EDGES
Site Name	SOUTH YAMHILL R	IVER #2081		Map C	ode		SYAM02081*
	SOUTH YAMHILL R LOWER WILLAMETT			Map C Sampli	ode ing Date		SYAM02081* 10/6/2004
Basin						461278	
Basin Subbasin	LOWER WILLAMETT YAMHILL RIVER			Sampli UTM	ing Date 10T	461278	10/6/2004 4989081
Basin Subbasin Surface Are	LOWER WILLAMETT YAMHILL RIVER ea (m2)	'E RIVER		Sampli UTM Native	ing Date 10T e Fish S	pecies Co	10/6/2004 4989081
Basin Subbasin Surface Are Average De	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m)	E RIVER 3567 0.3		Sampli UTM Native	ing Date 10T e Fish S gon Chul	pecies Co	10/6/2004 4989081
Basin Subbasin Surface Are Average De Water Temp	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C)	E RIVER 3567 0.3 13.5		Sampli UTM Native Ore Cott	ing Date 10T e Fish S gon Chul	pecies Co b	10/6/2004 4989081 Ilected:
Basin Subbasin Surface Are Average De Water Temp	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C)	E RIVER 3567 0.3		Sampli UTM Native Ore Cott	ing Date 10T e Fish S gon Chul ids	pecies Co b ace	10/6/2004 4989081 Illected: 4
Basin Subbasin Surface Are Average De Water Temp Percent Silt	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C)	E RIVER 3567 0.3 13.5		Sampli UTM Native Ore Cott Spe Red	ing Date 10T Fish S gon Chul ids ckled Da Iside Shir	pecies Co b ace	10/6/2004 4989081 Illected: 4 58 4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	E RIVER 3567 0.3 13.5 5		Sampli UTM Native Ore Cott Spe Red Nor	ing Date 10T Fish S gon Chul ids ckled Da Iside Shir	pecies Co b ace ners keminnows	10/6/2004 4989081 Illected: 4 58 4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0		Sampli UTM Native Ore Cott Spe Red Nori Larg	ing Date 10T e Fish S gon Chul ids ckled Da lside Shin thern Pil	pecies Co b ace ners keminnows	10/6/2004 4989081 Illected: 4 58 4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre	ing Date 10T Fish S gon Chul ids ckled Da Iside Shin thern Pil gescale S drollers sespine S	pecies Co b ace ners keminnows	10/6/2004 4989081 Illected: 4 58 4 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre	ing Date 10T Fish S gon Chul ids ckled Da Iside Shin thern Pil gescale S drollers	pecies Co b ace ners keminnows Suckers	10/6/2004 4989081 Illected: 4 58 4 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0 2 0 <u>0</u>		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre Salr	ing Date 10T Fish S gon Chul ids ckled Da Iside Shin thern Pil gescale S drollers sespine S	pecies Co b ace ners keminnows Suckers	10/6/2004 4989081 Illected: 4 58 4 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre Salr Larr	ing Date 10T 2 Fish S gon Chul ids ckled Da side Shin thern Pil gescale S drollers eespine S nonids ³ aprey	pecies Co b ace ners keminnows Suckers Stickleback	10/6/2004 4989081 Illected: 4 58 4 5 3 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0 <u>0</u> 12		Sampli UTM Native Cott Spe Red Nor Larg San Thre Salr Larr	ing Date 10T Fish S gon Chul ids ckled Da lside Shir thern Pil gescale S drollers sespine S nonids ³ aprey hative Fi	pecies Co b ace ners keminnows Suckers Stickleback	10/6/2004 4989081 illected: 4 58 4 58 4 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve GRAM	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0 <u>0</u> 12 2		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre Salr Larg Non-n We	ing Date 10T Fish S gon Chul ids ckled Da lside Shin thern Pil gescale S drollers eespine S nonids ³ aprey stive Fi estern M	pecies Co b ace hers keminnows Suckers Stickleback sh Specie osquitofish	10/6/2004 4989081 illected: 4 58 4 58 4 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0 <u>0</u> 12		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre Salr Larg Non-n We Ce	ing Date 10T 2 Fish S gon Chul ids ckled Da lside Shin thern Pil gescale S drollers sespine S nonids ³ nprey native Fi estern M ntrarchid	pecies Co b ace hers keminnows Suckers Stickleback sh Specie osquitofish	10/6/2004 4989081 illected: 4 58 4 5 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve GRAM	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0 <u>0</u> 12 2		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre Salr Larr Non-n We Ce Bul	ing Date 10T 2 Fish S gon Chul ids ckled Da iside Shin thern Pil gescale S drollers beespine S nonids ³ nprey native Fi estern M ntrarchid lheads	pecies Co b ace ners keminnows Suckers Stickleback Stickleback sh Specie osquitofish s ⁴	10/6/2004 4989081 illected: 4 58 4 58 4 5 5 5 5 5 5 5
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve GRAM	LOWER WILLAMETT YAMHILL RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	E RIVER 3567 0.3 13.5 5 0 12 0 <u>0</u> 12 2		Sampli UTM Native Ore Cott Spe Red Nor Larg San Thre Salr Larr Non-n We Ce Bul	ing Date 10T 2 Fish S gon Chul ids ckled Da side Shin thern Pil gescale S drollers sespine S nonids ³ aprey tative Fi estern M ntrarchid lheads mmon Ca	pecies Co b ace ners keminnows Suckers Stickleback Stickleback sh Specie osquitofish s ⁴	10/6/2004 4989081 illected: 4 58 4 58 4 5 5 5 5 5 5 5

Site Name				Map Code		WIGR1	
Basin Subbasin	LOWER WILLAMETTE	RIVER		Sampling Date	400454	4/29/20	
Subbasin				UTM 10T	490151		1960906
Surface Are	a (m2)	5913		Native Fish Sp	oecies Co	llected:	
Average De	pth (m)	2.2		Oregon Chub)		
Water Temp	erature (C)	18		Cottids			13
Percent Silt	/ Organics	90		Speckled Da			
	-			Redside Shir			
Types of a	quatic vegetation ¹			Northern Pik Largescale S		i	
Submerge	ent	29		Sandrollers			
Emergent		8		Threespine S	tickleback	c	
Floating		2		Salmonids ³	MONODACK	3	
Algae				Lamprey			
	Total	39		Lampicy			
Aquatic Ve	getation (genera)			Non-native Fig	sh Specie	es Colleo	ted:
GRAM		3		Western Mo		1	178
FRAX		5		Centrarchide	⁴ BG LB		113
POLY		20		Bullheads			
LEMN		2		Common Ca	rp		2
CALI		2		Other:			
ELOD		5		other.			
			NOTE:	WIGRICH ROAD	Bridge Ri	WILLOC	123*
Site Name Basin	WILLAMETTE RIVER	BACKWATER	NOTE:		BRIDGE RI 496450	WILL00 10/4/20	123*
Site Name Basin Subbasin	LOWER WILLAMETTE	BACKWATER	NOTE:	Map Code Sampling Date	496450	WILLOC 10/4/20	123 *)4
Site Name Basin Subbasin Surface Are	LOWER WILLAMETTE	BACKWATER RIVER	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp	496450 Decies Co	WILLOC 10/4/20	123 *)4
Site Name Basin Subbasin Surface Are Average Dep	LOWER WILLAMETTE a (m2) pth (m)	BACKWATER RIVER 300	NOTE:	Map Code Sampling Date UTM 10T	496450 Decies Co	WILLOC 10/4/20	123 *)4
Site Name Basin Subbasin Surface Are Average Dej Water Temp	LOWER WILLAMETTE a (m2) pth (m) erature (C)	BACKWATER RIVER 300 0.3 22	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub	496450 Decies Co	WILLOC 10/4/20	123 *)4
Site Name Basin Subbasin Surface Are Average Dej Water Temp	LOWER WILLAMETTE a (m2) pth (m) erature (C)	BACKWATER RIVER 300 0.3	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids	496450 Decies Co	WILLOC 10/4/20	123 *)4
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt	LOWER WILLAMETTE a (m2) pth (m) erature (C)	BACKWATER RIVER 300 0.3 22	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik	496450 Decies Co Decies Co Decies Co Decies Co Decies Co Decies Co	WILLOC 10/4/20	123 *)4
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹	BACKWATER RIVER 300 0.3 22 10	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S	496450 Decies Co Decies Co Decies Co Decies Co Decies Co Decies Co	WILLOC 10/4/20	123 *)4
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt J Types of ac Submerge	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers	496450 Decies Co Decies Co Dece Ders Seceninnows Suckers	WILLOC 10/4/20	123*)4 1976650
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S	496450 Decies Co Decies Co Dece Ders Seceninnows Suckers	WILLOC 10/4/20	123*)4 1976650
Site Name Basin Subbasin Surface Are Average Dej Water Temp Percent Silt , Types of ac Submerge Emergent Floating	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³	496450 Decies Co Decies Co Dece Ders Seceninnows Suckers	WILLOC 10/4/20	123*)4 1976650
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S	496450 Decies Co Decies Co Dece Ders Seceninnows Suckers	WILLOC 10/4/20	123*)4 1976650
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ac Submerge Emergent Floating Algae	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22 52	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³	496450 Decies Co Dece ders ce ders ce dece seminnows Suckers	WILLOC 10/4/200 Illected:	123*)4 1976650 1
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt . Types of ac Submerge Emergent Floating Algae Aquatic Ve	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22 52 74	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	496450 Decies Co Decies Co Dece Mers Seceninnows Suckers Suckers Stickleback	WILLOC 10/4/20 illected:	123*)4 1976650 1
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22 52 74 74	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	496450 Decies Co Decies Co Dece Secens Suckers Suckers Suckers Stickleback	WILLOC 10/4/20 illected:	123*)4 1976650 1
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt A Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM DOWN	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22 52 74 74 50 2	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis	496450 Decies Co Decies Co Dece Secens Suckers Suckers Suckers Stickleback	WILLOC 10/4/20 illected:	123*)4 1976650 1
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22 52 74 74	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Mo	496450 Decies Co Decies Co Dece Mers Reminnows Suckers Stickleback	WILLOC 10/4/20 illected:	123*)4 1976650 1
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM DOWN CARE	LOWER WILLAMETTE a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	BACKWATER RIVER 300 0.3 22 10 22 52 74 50 2 2 2	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Ma Centrarchids Bullheads	496450 Decies Co Decies Co Dece Mers Reminnows Suckers Stickleback	WILLOC 10/4/20 illected:	123*)4 1976650 1

		R BACKWATER		•	LL07253*
Basin	LOWER WILLAMETTE	ERIVER		5 1 5	4/2004
Subbasin				UTM 10T 496648	4976823
Surface Area	a (m2)	2756		Native Fish Species Collec	ted:
Average Dep	oth (m)	0.9		Oregon Chub	
Water Tempe	erature (C)	19		Cottids	
Percent Silt /		30		Speckled Dace	
	-	00		Redside Shiners	
Types of aq	quatic vegetation ¹			Northern Pikeminnows	4
Submerge	ent	38		Largescale Suckers Sandrollers	1
Emergent		6			
Floating		10		Threespine Sticklebacks	
Algae		<u>15</u>		Salmonids ³	
-	Total	69		Lamprey	
Aquatic Ve	getation (genera)			Non-native Fish Species C	ollected:
GRAM		5		Western Mosquitofish	31
LEMN		5		Centrarchids ⁴ BG PK L	35
AZOL		5		Bullheads	
ELOD		25		Common Carp	
MYRI		10			
FILA		15		Other: KF	-70 YP-3
SAGI		1	NOTE:	ODOT BRIDGE SITE	
			NOTE:		
Site Name	ANKENY NWR-WILL	OW MARSH		Map Code Wi	M1A
Basin	LOWER WILLAMETTE	E RIVER		Sampling Date 5/2	6/2004
	LOWER WILLAMETTE ANKENY	ERIVER		Sampling Date 5/2 UTM 10T 494684	6/2004 4958441
Subbasin	ANKENY	25120			4958441
Subbasin Surface Area	ANKENY a (m2)			UTM 10T 494684	4958441
Subbasin Surface Area Average Dep	ANKENY a (m2) oth (m)	25120		UTM 10T 494684 Native Fish Species Collec	4958441
Subbasin Surface Area Average Dep Water Tempe	ANKENY a (m2) oth (m) erature (C)	25120 0.7 17		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt /	ANKENY a (m2) oth (m) erature (C) t Organics	25120 0.7		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt /	ANKENY a (m2) oth (m) erature (C)	25120 0.7 17		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹	25120 0.7 17		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹	25120 0.7 17 100 57		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹	25120 0.7 17 100		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent Floating	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹	25120 0.7 17 100 57		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹	25120 0.7 17 100 57		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	4958441
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent Floating Algae	ANKENY a (m2) oth (m) erature (C) COrganics quatic vegetation ¹	25120 0.7 17 100 57 20		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³	4958441 ted:
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent Floating Algae	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹ ent	25120 0.7 17 100 57 20 77		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C	4958441 ted:
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent Floating Algae Aquatic Veg	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹ ent	25120 0.7 17 100 57 20 77 50		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish	4958441 ted:
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent Floating Algae Aquatic Veg POTA GRAM	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹ ent	25120 0.7 17 100 57 20 77 77 50 10		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴	4958441 ted:
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent Floating Algae Aquatic Veg POTA GRAM ELEO	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹ ent	25120 0.7 17 100 57 20 77 77 50 10 5		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴ Bullheads	4958441 ted:
Submerge Emergent Floating Algae Aquatic Veg POTA GRAM ELEO SALI	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹ ent	25120 0.7 17 100 57 20 77 50 10 5 5 5		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴	4958441 ted:
Subbasin Surface Area Average Dep Water Tempe Percent Silt / Types of aq Submerge Emergent Floating Algae Aquatic Veg POTA GRAM ELEO	ANKENY a (m2) oth (m) erature (C) ' Organics quatic vegetation ¹ ent	25120 0.7 17 100 57 20 77 77 50 10 5		UTM 10T 494684 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴ Bullheads Common Carp	4958441 ted:

Site Name Basin	ANKENY NWR-WILLAMET			Map Code Sampling Date	WM1B * 9/28/2004	
Subbasin ANKENY				UTM 10T	494684	4958441
Surface Area	a (m2)	25120		Native Fish Sp	ecies Collec	ted:
Average Dep	oth (m)	0.7		Oregon Chub		
Water Temp	erature (C)	19		Cottids		
Percent Silt / Organics 100			Speckled Dac Redside Shine			
Types of ac	quatic vegetation ¹			Northern Pike	eminnows	
Submerge Emergent	ent	25 60		Largescale Su Sandrollers		
Floating Algae	Total	5 <u>10</u> 100		Threespine St Salmonids ³ Lamprey	ICKIEDACKS	
Aquatic Ve	getation (genera)			Non-native Fish Species Collected:		
Poly Gram Fila Eleo		25 50 10 1		Western Mo Centrarchids Bullheads Common Car	4	
ALIS AZOL		5 5		Other:	NC) FISH
TYPH		2	NOTE:	PRE-INTRODUCT	ION SAMPLIN	G, 500 FISH INTR

MCKENZIE RIVER BASIN

Site Name BIG ISLAND				3IG1-4,6B
Basin MCKENZIE RIVER			1 0	/10/2004
Subbasin			UTM 10T 507253	4879014
Surface Area (m2)	8519		Native Fish Species Colle	ected:
Average Depth (m)	0.6		Oregon Chub	312
Water Temperature (C)	11		Cottids	2
Percent Silt / Organics	90		Speckled Dace	714
-	50		Redside Shiners	479
Types of aquatic vegetation ¹			Northern Pikeminnows	5
Submergent	25		Largescale Suckers Sandrollers	4
Emergent	37		Threespine Sticklebacks	7842
Floating	10		Salmonids ³ CH	7842
Algae			Lamprey	4
Total	72		Lamprey	
Aquatic Vegetation (genera)			Non-native Fish Species	Collected:
NUPH	10		Western Mosquitofish	
ELOD	20		Centrarchids ⁴	
SPAR	10		Bullheads	
GRAM	20		Common Carp	
SALI	5		Other:	
CALI	5		e difer	
CARE	2	NOTE:	POPULATION ESTIMATE	
Site Name BLUE RIVER #01323				BLUE01323*
Basin MCKENZIE RIVER				0/7/2004
Subbasin			UTM 10T 552645	4888990
Surface Area (m2)	1763		Native Fish Species Colle	ected:
Average Depth (m)	0.2		Oregon Chub	
Water Temperature (C)	14		Cottids	
Percent Silt / Organics	5		Speckled Dace	
-	5		Redside Shiners	
Types of aquatic vegetation ¹			Northern Pikeminnows	
Submergent	0		Largescale Suckers	
Emergent	5		Sandrollers	
Floating	0		Threespine Sticklebacks	
Algae	<u>0</u>		Salmonids ³ RB	2
Total	5		Lamprey	
Aquatic Vegetation (genera)			Non-native Fish Species	Collected:
	5		Western Mosquitofish	
CARE	Э		Centrarchids ⁴	
CARE				
CARE			Bullheads	
CARE			Bullheads Common Carp	
CARE				

Site Name		CHANNEL PONDS		Map Code		
Basin	MCKENZIE RIVER			Sampling Date		10/7/2004
Subbasin	S. FK. MCKENZIE			UTM 10T	559850	4888350
Surface Are	ea (m2)	8530		Native Fish S	pecies Co	llected:
Average De	pth (m)	1.5		Oregon Chu	ıb	
Water Temp	erature (C)	10		Cottids		1
Percent Silt	/ Organics	80		Speckled Da		5
Types of aquatic vegetation ¹			Redside Shi Northern Pi	ikeminnows	;	
Submerge	ent	51		Largescale	Suckers	
Emergent		10		Sandrollers		
Floating		1		Threespine		
Algae		<u>0</u>		Salmonids ³	СТ	1
-	Total	62		Lamprey		
Aquatic Ve	egetation (genera)			Non-native F	ish Specie	s Collected:
POTA		50		Western M	losquitofish	I
CARE		5		Centrarchic	ds ⁴	
SPAR		3		Bullheads		
AZOL		1		Common C	arp	
JUNC		1		Other:		
GRAM		1		other.		
POLY		1	NOTE:	POTENTIAL INT	RODUCTIO	N SITE-3 PONDS
Basin Subbasin	MCKENZIE RIVER			Sampling Date UTM 10T	515822	10/7/2004 4879343
Surface Are	ea (m2)	2400		Native Fish S	pecies Co	llected:
Average De	pth (m)	1.2		Oregon Chu	ıb	
Water Temp	erature (C)	12		Cottids		
Percent Silt		0		Speckled Da		
		v		Redside Shi		
Types of a	quatic vegetation ¹			Northern Pi		i
Submerge	ent	0		Largescale	Suckers	
Emergent		1		Sandrollers	00.11.1	
Floating		0		Threespine		S
Algae		<u>0</u>		Salmonids ³		
	Total	1		Lamprey		
Aquatic Ve	egetation (genera)			Non-native F	ish Specie	s Collected:
GRAM		1		Western M	losquitofish	I
		-		Centrarchic	ds ⁴	
				Bullheads		
				0	am	
				Common C	aip	
				Other:	arp	NO FISH

MCKENZIE RIVER BASIN

Site NameGATE CREEK #1324BasinMCKENZIE RIVEROchorainMCKENZIE RIVER			Map CodeGATE01324*Sampling Date10/7/2004UTM107	
Subbasin			UTM 10T 534309 4888070	
Surface Area (m2)	1250		Native Fish Species Collected:	
Average Depth (m)	0.2		Oregon Chub	
Water Temperature (C)	13		Cottids	
Percent Silt / Organics	0		Speckled Dace	
-	0		Redside Shiners	
Types of aquatic vegetation ¹			Northern Pikeminnows	
Submergent	0		Largescale Suckers	
Emergent	1		Sandrollers	
Floating	0		Threespine Sticklebacks	
Algae	<u>0</u>		Salmonids ³ UT 1	
Total	1		Lamprey	
Aquatic Vegetation (genera)			Non-native Fish Species Collected:	
CARE	1		Western Mosquitofish	
OARE	I		Centrarchids ⁴	
			Bullheads	
			Common Carp	
			Other:	
			other.	
		NOTE:	ODOT- SALMONID HABITAT	
Site Name GREEN ISLAND CHER	RY ORCH POND	NOTE:		
	RY ORCH POND	NOTE:	Map Code GREEN4	
Basin MCKENZIE RIVER	RY ORCH POND	NOTE:	Map Code GREEN4	
Basin MCKENZIE RIVER Subbasin		NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692	
Basin MCKENZIE RIVER Subbasin Surface Area (m2)	4008	NOTE:	Map CodeGREEN4Sampling Date5/5/2004UTM10T4913644886692Native Fish Species Collected:	
Basin MCKENZIE RIVER Subbasin Surface Area (m2)		NOTE:	Map CodeGREEN4Sampling Date5/5/2004UTM10T4913644886692Native Fish Species Collected:Oregon Chub	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m)	4008	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C)	4008 0.9	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics	4008 0.9 18	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics	4008 0.9 18	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹	4008 0.9 18	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent	4008 0.9 18 100	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Sandrollers	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent	4008 0.9 18 100 60	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating	4008 0.9 18 100 60	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ 3	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent	4008 0.9 18 100 60	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total	4008 0.9 18 100 60 30	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ 3	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³)	4008 0.9 18 100 60 30 100	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected:	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) CARE	4008 0.9 18 100 60 30 100 2	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected:	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) CARE SPAR	4008 0.9 18 100 60 30 100 2 20	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: 103 Vestern Mosquitofish 103 2	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) CARE SPAR POLY	4008 0.9 18 100 60 30 100 2 20 10	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: 103 Centrarchids ⁴ LB 2 Bullheads	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) CARE SPAR POLY MYRI	4008 0.9 18 100 60 30 100 2 20 10 30	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: 103 Western Mosquitofish 103 2	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) CARE SPAR POLY MYRI ELOD	4008 0.9 18 100 60 30 100 2 20 10 30 30 30	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: 103 Centrarchids ⁴ LB 2 Bullheads	
Basin MCKENZIE RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera³) CARE SPAR POLY MYRI	4008 0.9 18 100 60 30 100 2 20 10 30	NOTE:	Map Code GREEN4 Sampling Date 5/5/2004 UTM 10T 491364 4886692 Native Fish Species Collected: Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: 103 Centrarchids ⁴ LB 2 Bullheads 2	

MCKENZIE RIVER BASIN

Site Name MAGNE POND		Map Code MAGNE1B*
Basin MCKENZIE RIVER Subbasin		Sampling Date 10/12/2004 UTM 10T 560796 4890058
JUDDASIII		01W 101 300790 4090038
Surface Area (m2)	2175	Native Fish Species Collected:
Average Depth (m)	0.9	Oregon Chub
Water Temperature (C)	16	Cottids
Percent Silt / Organics	100	Speckled Dace
Types of aquatic vegetation ¹		Redside Shiners Northern Pikeminnows
	50	Largescale Suckers
Submergent	50	Sandrollers
Emergent	30	Threespine Sticklebacks
Floating	0	Salmonids ³ CT 1
Algae	<u>0</u>	Lamprey
Total	80	
Aquatic Vegetation (genera)		Non-native Fish Species Collected:
ΡΟΤΑ	50	Western Mosquitofish
SPAR	20	Centrarchids ⁴
CARE	5	Bullheads
JUNC	5	Common Carp
		Other:
		NOTE: POTENTIAL REINTRODUCTION SITE
Site Name RUSSELL POND		Map Code RUSS1F
Basin MCKENZIE RIVER		Sampling Date 5/16/2004
Subbasin MOHAWK RIVER		UTM 10T 515585 4897084
Surface Area (m2)	800	Native Fish Species Collected:
Average Depth (m)	1.5	Oregon Chub 721
Water Temperature (C)	13	Cottids
,	-	Speckled Dace
Percent Silt / Organics	100	Redside Shiners
Types of aquatic vegetation ¹		Northern Pikeminnows
Submergent	10	Largescale Suckers
Emergent	20	Sandrollers
	20 0	Threespine Sticklebacks
Floating		Salmonids ³
Algae Total	<u>0</u> 30	Lamprey
Aquatic Vegetation (genera)	30	Non-native Fish Species Collected:
CHAR	10	Western Mosquitofish
GRAM	20	Centrarchids ⁴
		Bullheads
		Common Carp
SALI		
SALI		Other:

Site Name		OND		Map C			SHE		
Basin					ing Date	E4 500 4	5/6/2		
Subbasin	MOHAWK RIVER			UTM	10T	515031		4897452	
Surface Are	a (m2)	700		Native	e Fish S	pecies C	ollect	ed:	
Average De	pth (m)	2		Ore	gon Chu	b		104	49
Water Temp	erature (C)	15		Cott					
Percent Silt	/ Organics	100		•	ckled Da				43
Types of a	quatic vegetation ¹				lside Shi thern Pi	ners keminnow	/S	11:	32
Submerge	ont	50		Larg	gescale \$	Suckers			
Emergent		10		San	drollers				
Floating		20				Sticklebac	ks		
Algae		20		Salr	nonids ³				
Aigae	Total	80		Lam	nprey				
Aquatic Ve	getation (genera)			Non-r	native Fi	sh Speci	es Co	llected:	
MYRI		50		We	estern M	osquitofis	h		
NYMP		20		Ce	ntrarchid	s ⁴			
CARE		10		Bu	llheads				
				Co	mmon Ca	arp			
				Other	:				
			NOTE:		ATION E	STIMATE			
			NOTE.	FOFUL					
Site Name		POND	NOTE.	Map C			SHE	T2A	
	Shetzline Middle I Mckenzie River	POND	NOTE.	Map C			SHE 5/6/2		
		POND	NOTE.	Map C	ode	515031	5/6/2		
Basin Subbasin	MCKENZIE RIVER MOHAWK RIVER	POND 700		Map C Sampl UTM	Code ing Date 10T		5/6/2	2004 4897492	
Basin Subbasin Surface Are	MCKENZIE RIVER MOHAWK RIVER a (m2)			Map C Sampl UTM Native	Code ing Date 10T	515031 pecies C	5/6/2	2004 4897492	
Basin Subbasin Surface Are Average De	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m)	700 2		Map C Sampl UTM Native	Code ing Date 10T e Fish S gon Chul	515031 pecies C	5/6/2	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C)	700 2 15		Map C Sampl UTM Native Ore Cott	Code ing Date 10T e Fish S gon Chul	515031 pecies C	5/6/2	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C)	700 2		Map C Sampl UTM Native Ore Cott	Code ing Date 10T e Fish S gon Chul	515031 pecies C o	5/6/2	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C)	700 2 15		Map C Sampl UTM Native Ore Cott Spe Rec Nor	code ing Date 10T e Fish S gon Chul tids eckled Da Iside Shi thern Pi	515031 pecies C o nce ners keminnow	5/6/2 ollecte	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹	700 2 15 100		Map C Sampl UTM Native Ore Cottl Spe Rec Nor Larg	Code ing Date 10T e Fish S gon Chul ids eckled Da side Shi thern Pi gescale S	515031 pecies C o nce ners keminnow	5/6/2 ollecte	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	700 2 15 100 35		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San	Code ing Date 10T e Fish S gon Chul ids eckled Da dside Shi thern Pi gescale S ddrollers	515031 pecies C o nece ners keminnow Suckers	5/6/2 ollecto	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	700 2 15 100		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre	Code ing Date 10T e Fish S gon Chul ids eckled Da dside Shi thern Pi gescale S idrollers eespine S	515031 pecies C o nce ners keminnow	5/6/2 ollecto	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	700 2 15 100 35		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr	Code ing Date 10T e Fish S gon Chul tids sckled Da Iside Shi thern Pi gescale S idrollers sespine S nonids ³	515031 pecies C o nece ners keminnow Suckers	5/6/2 ollecto	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	700 2 15 100 35		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr	Code ing Date 10T e Fish S gon Chul ids eckled Da dside Shi thern Pi gescale S idrollers eespine S	515031 pecies C o nece ners keminnow Suckers	5/6/2 ollecto	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	700 2 15 100 35 14		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Lar	Code ing Date 10T e Fish S gon Chul tids eckled Da Iside Shi thern Pi gescale S idrollers eespine S nonids ³	515031 pecies C o nece ners keminnow Suckers	5/6/2 ollecto /s ks	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	700 2 15 100 35 14		Map C Sampl UTM Native Ore Cottl Spe Rec Nor Larg San Thre Salr Lar	Code ing Date 10T e Fish S gon Chul ids eckled Da dside Shi thern Pi gescale S idrollers eespine S nonids ³ nprey	515031 pecies C o nece hers keminnow Suckers Sticklebac	5/6/2 ollecto /s ks	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve CARE	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	700 2 15 100 35 14 49		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larr Non-r We	Code ing Date 10T e Fish S gon Chul ids eckled Da dside Shi thern Pi gescale S idrollers eespine S nonids ³ nprey	515031 pecies C b ners keminnow Suckers Sticklebac sh Speci osquitofis	5/6/2 ollecto /s ks	2004 4897492	9
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	700 2 15 100 35 14 49 3		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larr Non-r We Ce	Code ing Date 10T e Fish S gon Chul ids eckled Da dside Shi thern Pi gescale S idrollers eespine S nonids ³ nprey native Fi estern M	515031 pecies C b ners keminnow Suckers Sticklebac sh Speci osquitofis	5/6/2 ollecto /s ks	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve CARE ELOD	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	700 2 15 100 35 14 49 3 5		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg San Thre Salr Larg San We E Ce Bul	Code ing Date 10T e Fish S gon Chul ids eckled Da diside Shii thern Pi gescale S idrollers eespine S nonids ³ aprey native Fi estern M ntrarchid	515031 pecies C o nece hers keminnow Suckers Sticklebac sticklebac sh Speci osquitofis s ⁴ BG	5/6/2 ollecto /s ks	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve CARE ELOD MYRI	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	700 2 15 100 35 14 49 3 5 30		Map C Sampl UTM Native Ore Cottl Spe Rec Nor Larg San Thre Salr Larr Non-r We Ce Bul Co	Code ing Date 10T e Fish S gon Chul ids eckled Da diside Shii thern Pi gescale S idrollers eespine S nonids ³ aprey native Fi estern M ntrarchid llheads mmon Ca	515031 pecies C o nece hers keminnow Suckers Sticklebac sticklebac sh Speci osquitofis s ⁴ BG	5/6/2 ollecto /s ks	2004 4897492	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve CARE ELOD MYRI SALI	MCKENZIE RIVER MOHAWK RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	700 2 15 100 35 14 49 3 5 30 2		Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg San Thre Salr Larg San We E Ce Bul	Code ing Date 10T e Fish S gon Chul ids eckled Da diside Shii thern Pi gescale S idrollers eespine S nonids ³ aprey native Fi estern M ntrarchid llheads mmon Ca	515031 pecies C o nece hers keminnow Suckers Sticklebac sticklebac sh Speci osquitofis s ⁴ BG	5/6/2 ollecto /s ks	2004 4897492	

MCKENZIE RIVER BASIN

Site Name	SHETZLINE NORTH PO MCKENZIE RIVER	ND		Map Code SHET3A	
Basin				Sampling Date 5/6/2004	7500
Subbasin	MOHAWK RIVER			UTM 10T 515031 489	7532
Surface Are	ea (m2)	700		Native Fish Species Collected:	
Average De	pth (m)	2		Oregon Chub	
Water Temp	perature (C)	15		Cottids	
Percent Silt	/ Organics	100		Speckled Dace	
	0	100		Redside Shiners	
Types of a	quatic vegetation ¹			Northern Pikeminnows	
Submerg	ent	39		Largescale Suckers	
Emergent	t	25		Sandrollers	
Floating				Threespine Sticklebacks Salmonids ³	
Algae				Lamprey	
	Total	64		Lampley	
Aquatic Ve	egetation (genera)			Non-native Fish Species Collected	d:
CALI		5		Western Mosquitofish	
JUNC		15		Centrarchids ⁴ BG	36
MYRI		30		Bullheads	
ELEO		5		Common Carp	
GRAM		3		Other:	
ELOD		5			
SALI		1	NOTE:	HABITAT PROJECT SUMMER 2004	

Site Name BARNHARD SLOU		Map Code BAR	
Basin MIDDLE FORK WILL	AMETTE RIVER	1 0	/2004
Subbasin		UTM 10T 539426	4843773
Surface Area (m2)	1440	Native Fish Species Collecte	ed:
Average Depth (m)	0.8	Oregon Chub	2
Water Temperature (C)	9	Cottids	3
Percent Silt / Organics	90	Speckled Dace	3
-	00	Redside Shiners	3
Types of aquatic vegetation ¹		Northern Pikeminnows	-
Submergent	5	Largescale Suckers	2
Emergent	80	Sandrollers	
Floating	5	Threespine Sticklebacks	
Algae	<u>5</u>	Salmonids ³ CT, CH=1	2
Total	<u>-</u> 95	Lamprey	
Aquatic Vegetation (genera)		Non-native Fish Species Co	llected:
OENA	20	Western Mosquitofish	
-	20 50	Centrarchids ⁴	
SPAR GRAM		Bullheads	
	10	Common Carp	
	5	common carp	
FILA	5	Other:	
CALI	5		
	NO	TE:	
Site Name LOWER BUCKHEAI	NO D ENHANCEMENT PND		14E
Site Name LOWER BUCKHEAI Basin MIDDLE FORK WILL	D ENHANCEMENT PND	Map Code BCK	(14E /2004
	D ENHANCEMENT PND AMETTE RIVER	Map Code BCK	
Basin MIDDLE FORK WILL	D ENHANCEMENT PND AMETTE RIVER	Map CodeBCKSampling Date4/14/	/2004
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2)	D ENHANCEMENT PND AMETTE RIVER	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte	/2004 4848623
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2)	D ENHANCEMENT PND AMETTE RIVER	Map Code BCK Sampling Date 4/14, UTM 10T 536825 Native Fish Species Collecte Oregon Chub	/2004 4848623
Basin MIDDLE FORK WILL	D ENHANCEMENT PND AMETTE RIVER 540	Map Code BCK Sampling Date 4/14, UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids	2004 4848623 ed: 706
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C)	D ENHANCEMENT PND AMETTE RIVER 540 0.8	Map Code BCK Sampling Date 4/14, UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace	22004 4848623 ed: 706 2
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13	Map Code BCK Sampling Date 4/14, UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners	2004 4848623 ed: 706
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows	22004 4848623 ed: 706 2
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m)	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers	22004 4848623 ed: 706 2
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Sandrollers	22004 4848623 ed: 706 2
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	22004 4848623 ed: 706 2
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ 3	22004 4848623 ed: 706 2
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	22004 4848623 ed: 706 2
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25 25 10	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ 3	22004 4848623 ed: 706 2 1
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³)	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25 10 90	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Stample Sticklebacks	22004 4848623 ed: 706 2 1
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) GRAM	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25 10 90 5	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey	22004 4848623 ed: 706 2 1
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) GRAM ELOD	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25 10 90 5 10	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected Western Mosquitofish	22004 4848623 ed: 706 2 1
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) GRAM ELOD JUNC	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25 10 90 5 10 90 5 10 10	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecter Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collecter Western Mosquitofish Centrarchids ⁴ Bullheads	22004 4848623 ed: 706 2 1
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera³) GRAM ELOD JUNC ELEO	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25 10 90 5 10 90 5 10 10 10 10	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected Western Mosquitofish Centrarchids ⁴ Bullheads Common Carp	22004 4848623 ed: 706 2 1
Basin MIDDLE FORK WILL Subbasin BUCKHEAD CREEK Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) GRAM ELOD JUNC	D ENHANCEMENT PND AMETTE RIVER 540 0.8 13 100 55 25 10 90 5 10 90 5 10 10	Map Code BCK Sampling Date 4/14/ UTM 10T 536825 Native Fish Species Collecter Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collecter Western Mosquitofish Centrarchids ⁴ Bullheads	22004 4848623 ed: 706 2 1

Site Name Basin	MIDDLE BUCKHEAD MIDDLE FORK WILLA	D ENHANCEMENT PD		Map C Sampli	ode ng Date		BCK15E 4/14/2004	4
Subbasin	BUCKHEAD CREEK			UTM	-	537105		+ 848567
Surface Are	ea (m2)	500		Native	Fish S	pecies Co	ollected:	
Average De		0.8			gon Chu	-		428
-				Cott		0		420
Water Temp		13			ckled Da	ace		10
Percent Silt	/ Organics	95			side Shi			5
Types of a	quatic vegetation ¹			Nor	hern Pi	keminnow	S	
Submerg	ent	55			jescale :	Suckers		
Emergent	t	20			drollers			
Floating		10			espine : nonids ³	Stickleback	S	
Algae		<u>5</u>						
	Total	85		Lam	prey			
Aquatic Ve	egetation (genera)			Non-n	ative Fi	sh Speci	es Collect	ed:
GRAM		20		We	stern M	osquitofis	า	
ELOD		50		Cer	ntrarchid	s ⁴		
LEMN		10		Bul	lheads			
CALI		5		Cor	nmon Ca	arp		
				Other	:			
			NOTE:	POPUL	ATION E	STIMATE-	POND MAE	DE 1998
Site Name	UPPER BUCKHEAD	ENHANCEMENT PND	NOTE:	POPUL	-	STIMATE-	POND MAE	DE 1998
	UPPER BUCKHEAD MIDDLE FORK WILL		NOTE:	Map C	-	STIMATE-	-	
Basin			NOTE:	Map C	ode ng Date	STIMATE- 537144	BCK16E 4/14/2004	
Basin Subbasin	MIDDLE FORK WILL BUCKHEAD CREEK		NOTE:	Map C Sampli UTM	ode ng Date 10T	-	BCK16E 4/14/2004	4
Basin Subbasin Surface Are	MIDDLE FORK WILL/ BUCKHEAD CREEK ea (m2)	AMETTE RIVER	NOTE:	Map C Sampli UTM Native	ode ng Date 10T	537144 pecies Co	BCK16E 4/14/2004	4
Basin Subbasin Surface Are Average De	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m)	AMETTE RIVER 300 0.8	NOTE:	Map C Sampli UTM Native	ode ng Date 10T • Fish S gon Chu	537144 pecies Co	BCK16E 4/14/2004	4
Basin Subbasin Surface Are Average De Water Temp	MIDDLE FORK WILL/ BUCKHEAD CREEK ea (m2) pth (m) perature (C)	AMETTE RIVER 300 0.8 13	NOTE:	Map C Sampli UTM Native Ore	ode ng Date 10T • Fish S gon Chu	537144 pecies C o	BCK16E 4/14/2004	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics	AMETTE RIVER 300 0.8	NOTE:	Map C Sampli UTM Native Ore Cott Spe	ode ng Date 10T e Fish S gon Chu ids	537144 pecies Co b	BCK16E 4/14/2004	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILL/ BUCKHEAD CREEK ea (m2) pth (m) perature (C)	AMETTE RIVER 300 0.8 13	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi	537144 pecies Co b	BCK16E 4/14/200- 4: bllected:	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	AMETTE RIVER 300 0.8 13 95	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nor	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi	537144 pecies Co b ace ners keminnow	BCK16E 4/14/200- 4: bllected:	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 300 0.8 13 95 60	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi thern Pi gescale s drollers	537144 pecies Co b ace ners keminnow Suckers	BCK16E 4/14/200 4 bilected:	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 300 0.8 13 95 60 28	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San Thre	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi .hern Pi gescale s drollers sespine s	537144 pecies Co b ace ners keminnow	BCK16E 4/14/200 4 bilected:	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 300 0.8 13 95 60 28 2	NOTE:	Map C Sampli UTM Native Cott Spe Red Nort Larg San Thre Saln	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi ckled Da side Shi chern Pi gescale s drollers eespine s nonids ³	537144 pecies Co b ace ners keminnow Suckers	BCK16E 4/14/200 4 bilected:	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 300 0.8 13 95 60 28	NOTE:	Map C Sampli UTM Native Cott Spe Red Nort Larg San Thre Saln	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi .hern Pi gescale s drollers sespine s	537144 pecies Co b ace ners keminnow Suckers	BCK16E 4/14/200 4 bilected:	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 300 0.8 13 95 60 28 2 <u>0</u>	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San Thre Saln Lam	ode ng Date 10T P Fish S gon Chu ids ckled Da side Shi chern Pi gescale drollers sespine s nonids ³ prey	537144 pecies Co b ace ners keminnow Suckers Stickleback	BCK16E 4/14/200 4 bilected:	4 848481
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 300 0.8 13 95 60 28 2 0 90	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San Thre Saln Lam	ode ng Date 10T P Fish S gon Chu ids ckled Da side Shi ckled Da side Shi chern Pi gescale s drollers bespine s nonids ³ prey ative Fi	537144 pecies Co b ace ners keminnow Suckers Stickleback	BCK16E 4/14/200- 4 bilected: s s s s s s s	4 848481
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 300 0.8 13 95 60 28 2 <u>0</u> 90 10	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nord Larg San Thre Saln Lam Non-n	ode ng Date 10T P Fish S gon Chu ids ckled Da side Shi ckled Da side Shi chern Pi gescale s drollers bespine s nonids ³ prey ative Fi	537144 pecies Co b ace ners keminnow Suckers Stickleback sh Specie osquitofisl	BCK16E 4/14/200- 4 bilected: s s s s s s s	4 848481
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR ELOD	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 300 0.8 13 95 60 28 2 0 90 10 60	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Lar San Thre Saln Lar We Cer	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi ckled Da side Shi chern Pi gescale s drollers bespine s nonids ³ prey ative Fi	537144 pecies Co b ace ners keminnow Suckers Stickleback sh Specie osquitofisl	BCK16E 4/14/200- 4 bilected: s s s s s s s	4 848481
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR ELOD POLY	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 300 0.8 13 95 60 28 2 0 90 10 60 2	NOTE:	Map C Sampli UTM Native Cott Spe Red Nord Larg San Thre Saln Lam We Cel Bul	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi chern Pi gescale s drollers sespine s nonids ³ prey ative Fi stern M ntrarchid lheads	537144 pecies Co b ace ners keminnow Suckers Stickleback sh Specie osquitofish s ⁴	BCK16E 4/14/200- 4 bilected: s s s s s s s	4 848481
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR ELOD POLY LEMN	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 300 0.8 13 95 60 28 2 <u>0</u> 90 10 60 2 2 2	NOTE:	Map C Sampli UTM Native Ore Cott Spe Red Nort Larg San Thre Saln Larr Non-n We Cen Bul Cor	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi ckled Da side Shi chern Pi gescale S drollers sespine S nonids ³ prey ative Fi stern M ntrarchid lheads mmon Ca	537144 pecies Co b ace ners keminnow Suckers Stickleback sh Specie osquitofish s ⁴	BCK16E 4/14/200 4 bilected: s s s s s s s s s s s	4 848481 ed:
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR ELOD POLY	MIDDLE FORK WILLA BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 300 0.8 13 95 60 28 2 0 90 10 60 2	NOTE:	Map C Sampli UTM Native Cott Spe Red Nord Larg San Thre Saln Lam We Cel Bul	ode ng Date 10T Fish S gon Chu ids ckled Da side Shi ckled Da side Shi chern Pi gescale S drollers sespine S nonids ³ prey ative Fi stern M ntrarchid lheads mmon Ca	537144 pecies Co b ace ners keminnow Suckers Stickleback sh Specie osquitofish s ⁴	BCK16E 4/14/200- 4 bilected: s s s s s s s	4 848481 ed:

Site Name				Map Code		BCK7I	
Basin Subbasin	MIDDLE FORK WILL BUCKHEAD CREEK			Sampling Date UTM 10T	538218	4/19/2004 48467;	30
Subbasili	BUCKI IEAD CREEK				550210	40407	59
Surface Are	ea (m2)	5953		Native Fish S	pecies Co	llected:	
Average De	pth (m)	1.2		Oregon Chul	D		1346
Water Temp	perature (C)	13		Cottids			
Percent Silt	/ Organics	100		Speckled Da			345
	quatic vegetation ¹			Redside Shir Northern Pil			2941
Submerg	ent	32		Largescale S	Suckers		
Emergent		32		Sandrollers			
Floating		0		Threespine S		S	
Algae		v		Salmonids ³	CT		1
, iiguo	Total	62		Lamprey			
Aquatic Ve	egetation (genera)			Non-native Fi	sh Specie	s Collected:	
POTA		10		Western M	•		
CARE		20		Centrarchid	s ⁴		
VALI		20		Bullheads			
SALI		10		Common Ca	ırp		
CALI		2		Other:			
		I	NOTE: F	POPULATION E	STIMATE		
Site Name	BUCKHEAD CREEK		-	POPULATION E	STIMATE	BCK9-12F	
	BUCKHEAD CREEK MIDDLE FORK WILL		-		STIMATE	BCK9-12F 4/22/2004	
Basin				Map Code	537950		19
Basin Subbasin	MIDDLE FORK WILL BUCKHEAD CREEK			Map Code Sampling Date	537950	4/22/2004 48479 ⁻	19
Basin Subbasin Surface Are	MIDDLE FORK WILL BUCKHEAD CREEK a (m2)	AMETTE RIVER		Map Code Sampling Date UTM 10T	537950 pecies Co	4/22/2004 48479 Ilected:	19 1121
Basin Subbasin Surface Are Average De	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m)	AMETTE RIVER 11290		Map Code Sampling Date UTM 10T Native Fish S	537950 pecies Co	4/22/2004 48479 Ilected:	
Basin Subbasin Surface Are Average De Water Temp	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C)	AMETTE RIVER 11290 0.8 9		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł	537950 pecies Co	4/22/2004 48479 Ilected:	1121
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics	AMETTE RIVER 11290 0.8		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids	537950 pecies Co	4/22/2004 48479 Ilected:	1121 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C)	AMETTE RIVER 11290 0.8 9		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shin Northern Pil	537950 pecies Co o ce ners keminnows	4/22/2004 48479	1121 2 289
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	AMETTE RIVER 11290 0.8 9 95		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shin Northern Pil Largescale S	537950 pecies Co o ce ners keminnows	4/22/2004 48479	1121 2 289 1892
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 11290 0.8 9 95 70		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers	537950 pecies Co o ce ners keminnows Suckers	4/22/2004 48479 Ilected:	1121 2 289 1892 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 11290 0.8 9 95 70 20		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S	537950 pecies Co o ce hers keminnows Suckers Sticklebacks	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 11290 0.8 9 95 70 20 0		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³	537950 pecies Co o ce hers keminnows Suckers Sticklebacks	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 11290 0.8 9 95 70 20		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S	537950 pecies Co o ce hers keminnows Suckers Sticklebacks	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 11290 0.8 9 95 70 20 0 0 <u>0</u>		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³	537950 pecies Co o ce ners keminnows Suckers Sticklebacks CT RB	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 11290 0.8 9 95 70 20 0 0 0 90		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	537950 pecies Co o ce ners suckers Suckers Sticklebacks CT RB	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve CERA	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 11290 0.8 9 95 70 20 0 0 0 90 50		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	537950 pecies Co o ce hers suckers Sticklebacks CT RB sh Specie osquitofish	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve CERA POLY	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 11290 0.8 9 95 70 20 0 0 0 <u>0</u> 90 50 10		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M	537950 pecies Co o ce hers suckers Sticklebacks CT RB sh Specie osquitofish	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve CERA POLY CALI	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 11290 0.8 9 95 70 20 0 0 0 90 50 10 5		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid	537950 pecies Co o ce hers keminnows Suckers Sticklebacks CT RB sh Specie osquitofish s ⁴	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve CERA POLY CALI CARE	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 11290 0.8 9 95 70 20 0 0 0 90 50 10 5 2		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid Bullheads Common Ca	537950 pecies Co o ce hers keminnows Suckers Sticklebacks CT RB sh Specie osquitofish s ⁴	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve CERA POLY CALI	MIDDLE FORK WILL BUCKHEAD CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent t	AMETTE RIVER 11290 0.8 9 95 70 20 0 0 0 90 50 10 5		Map Code Sampling Date UTM 10T Native Fish S Oregon Chuł Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid Bullheads	537950 pecies Co o ce hers keminnows Suckers Sticklebacks CT RB sh Specie osquitofish s ⁴	4/22/2004 48479 Ilected:	1121 2 289 1892 2 1 1

MIDDLE FORK WILLAMETTE RIVER BASIN

Site Name	JASPER PARK SLOUGH			Map C			CAP1	
Basin	MIDDLE FORK WILLAMET	TE RIVER			ng Date		5/3/20	
Subbasin				UTM	10T	507693		4870573
Surface Area	a (m2)	3600		Native	Fish Sp	pecies Co	ollecte	d:
Average Dep	oth (m)	1		Oreg	gon Chub)		
Water Temp	erature (C)	14		Cotti				
Percent Silt /	/ Organics	100			ckled Da			4
Types of ac	quatic vegetation ¹				side Shir hern Pik	iers ceminnow	s	1 27
		400			jescale S		-	
Submerge Emergent	ent	100		San	drollers			
Floating						Stickleback	S	36
Algae					nonids ³			
-	Total	100		Lam	prey			
Aquatic Ve	getation (genera)			Non-n	ative Fi	sh Speci	es Coll	ected:
MYRI		100				osquitofis	า	187
					ntrarchide	s⁴LB		1
					lheads	rD.		
					nmon Ca	ιh		
				Other:	:			
			NOTE:	CHOKE	D WITH F	PARROTFE	ATHER	8
Site Name	DEXTER EAST ALCOVE	E		Map Co	ode		DEX1	H*
Basin	MIDDLE FORK WILLAMET	TE RIVER			ng Date		9/7/20	004
Subbasin	DEXTER RESERVOIR			UTM	10T	517410		4861755
Surface Area	a (m2)	200		Native	Fish Sp	pecies Co	ollecte	d:
Average Dep	oth (m)	0.7		Oreg	gon Chub)		
Water Temp	erature (C)	17		Cotti				
Percent Silt /	/ Organics	100			ckled Da			
Types of ac	quatic vegetation ¹				side Shir hern Pik	iers ceminnow	5	5
		00			jescale S		-	0
Submerge		30 30			drollers			
Emergent Floating		30				Stickleback	s	
Algae					nonids ³			
Ŭ	Total	60		Lam	prey			
Aquatic Ve	getation (genera)			Non-n	ative Fig	sh Speci	es Coll	ected:
LYSI		20				osquitofis	า	
ELOD		30			ntrarchide	s ⁴		
SPAR		10			lheads			
				Con	nmon Ca	rp		
				Other:				

NOTE:

Site Name	DEXTER RV ALCO			Map C			DEX3	-	
Basin	MIDDLE FORK WILL				ing Date		9/16/2		
Subbasin	DEXTER RESERVOIR	र		UTM	10T	515504		4862061	
Surface Are	ea (m2)	1080		Native	e Fish S	pecies C	ollecte	d:	
Average De	pth (m)	0.4		Ore	gon Chul	C		793	
Water Temp	erature (C)	18		Cott				7	
Percent Silt	/ Organics	100			ckled Da			F 40	
Types of a	quatic vegetation ¹				lside Shii thern Pil	ners keminnow	s	540 1	
		70		Larg	gescale \$	Suckers			
Submerge		70		San	drollers				
Emergent		7		Thre	eespine S	Sticklebacl	s		
Floating				Salr	monids ³				
Algae	Total	87		Larr	nprey				
Aquatic Ve	egetation (genera)	07		Non-r	native Fi	sh Speci	es Coll	lected:	
-	gotation (genera)					osquitofis			
POTA		20			ntrarchid			2	
GRAM		5			llheads			2	
MYRI		50			mmon Ca	arn			
ELEO		2				űΡ			
POLY		10		Other	:				
			NOTE:	POPUL	ATION E	STIMATE			
Site Name	ELIJAH BRISTOW B	ERRY SLOUGH	NOTE:			STIMATE	EB10	ĸ	
Site Name Basin	Elijah Bristow B Middle Fork Will/		NOTE:	Map C		STIMATE	EB10 4/21/2		
Basin			NOTE:	Map C	Code	STIMATE 513244	4/21/2		
Basin Subbasin	MIDDLE FORK WILL/ ELIJAH BRISTOW	AMETTE RIVER	NOTE:	Map C Sampl UTM	Code ing Date 10T	513244	4/21/2	2004 4865199	
Basin Subbasin Surface Are	MIDDLE FORK WILL/ ELIJAH BRISTOW	AMETTE RIVER 6991	NOTE:	Map C Sampl UTM Native	Code ing Date 10T e Fish S	513244 pecies Co	4/21/2	2004 4865199 d:	
Basin Subbasin Surface Are Average De	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m)	AMETTE RIVER 6991 1.2	NOTE:	Map C Sampl UTM Native Ore	Code ing Date 10T e Fish S gon Chul	513244 pecies Co	4/21/2	2004 4865199	
Basin Subbasin Surface Are Average De Water Temp	MIDDLE FORK WILL/ ELIJAH BRISTOW ea (m2) pth (m) eerature (C)	6991 1.2 12.5	NOTE:	Map C Sampl UTM Native Ore Cott	Code ing Date 10T e Fish S gon Chul	513244 pecies C o	4/21/2	2004 4865199 d:	
Basin Subbasin Surface Are Average De Water Temp	MIDDLE FORK WILL/ ELIJAH BRISTOW ea (m2) pth (m) eerature (C)	AMETTE RIVER 6991 1.2	NOTE:	Map C Sampl UTM Native Ore Cott	Code ing Date 10T e Fish S gon Chul tids	513244 pecies Co	4/21/2	2004 4865199 d: 2696	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILL/ ELIJAH BRISTOW ea (m2) pth (m) eerature (C)	6991 1.2 12.5	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shir	513244 pecies Co	4/21/2	2004 4865199 d: 2696 138	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹	6991 1.2 12.5 100	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shir	513244 pecies Co o ice hers keminnow	4/21/2	2004 4865199 d: 2696 138 290	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 6991 1.2 12.5 100 10	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil	513244 pecies Co o ice hers keminnow	4/21/2	2004 4865199 d: 2696 138 290	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	6991 1.2 12.5 100	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale s indrollers	513244 pecies Co o ice hers keminnow	4/21/2	2004 4865199 d: 2696 138 290	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 6991 1.2 12.5 100 10	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale S indrollers eespine S monids ³	513244 pecies Co o ners keminnow Suckers	4/21/2	2004 4865199 d: 2696 138 290 5	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 6991 1.2 12.5 100 10	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale S indrollers eespine S	513244 pecies Co o ners keminnow Suckers	4/21/2	2004 4865199 d: 2696 138 290 5	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 6991 1.2 12.5 100 10 90	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pii gescale S indrollers eespine S monids ³	513244 pecies Co o ners keminnow Suckers	4/21/2 ollecte	2004 4865199 d: 2696 138 290 5 173	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	AMETTE RIVER 6991 1.2 12.5 100 10 90 100	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale S indrollers eespine S monids ³ nprey	513244 pecies Co o lice hers keminnow Suckers Stickleback	4/21/2 ollecte s s es Coll	2004 4865199 d: 2696 138 290 5 173	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELOD	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	AMETTE RIVER 6991 1.2 12.5 100 10 90 100 70	NOTE	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larr Non-r We	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale S indrollers eespine S monids ³ nprey	513244 pecies Ca po ners keminnow Suckers Stickleback sh Speci osquitofis	4/21/2 ollecte s s es Coll	2004 4865199 d: 2696 138 290 5 173	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELOD CALI	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	AMETTE RIVER 6991 1.2 12.5 100 10 90 100 70 15	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larr Non-r We Ce	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale S indrollers eespine S monids ³ hprey hative Fi estern M	513244 pecies Ca po ners keminnow Suckers Stickleback sh Speci osquitofis	4/21/2 ollecte s s es Coll	2004 4865199 d: 2696 138 290 5 173	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELOD CALI SPAR	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	AMETTE RIVER 6991 1.2 12.5 100 10 90 100 100 70 15 5	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larr Non-r We Ce Bul	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale S indrollers eespine S monids ³ nprey native Fi estern M ntrarchid	513244 pecies Co ace hers keminnow Suckers Stickleback sh Speci osquitofis s ⁴	4/21/2 ollecte s s es Coll	2004 4865199 d: 2696 138 290 5 173	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELOD CALI	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	AMETTE RIVER 6991 1.2 12.5 100 10 90 100 70 15	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larr Non-r We Ce Bul	Code ing Date 10T e Fish S gon Chul tids eckled Da dside Shin thern Pil gescale S adrollers eespine S monids ³ nprey hative Fi estern M ntrarchid llheads mmon Ca	513244 pecies Co ace hers keminnow Suckers Stickleback sh Speci osquitofis s ⁴	4/21/2 ollecte s s es Coll	2004 4865199 d: 2696 138 290 5 173	

MIDDLE FORK WILLAMETTE RIVER BASIN

Site Name	ELIJAH BRISTOW LO		Map CodeEB13GSampling Date5/3/2004
Basin Subbasin	ELIJAH BRISTOW		Sampling Date 5/3/2004 UTM 10T 513884 4864390
Oubbasin	ELIXATERIOTOW		
Surface Are	a (m2)	1050	Native Fish Species Collected:
Average De	pth (m)	0.9	Oregon Chub
Water Temp	erature (C)	17	Cottids
Percent Silt	/ Organics	80	Speckled Dace
Types of a	quatic vegetation ¹		Redside Shiners Northern Pikeminnows
			Largescale Suckers
Submerge		31	Sandrollers
Emergent		45	Threespine Sticklebacks
Floating			Salmonids ³
Algae	Total	76	Lamprey
Aquatic Ve	getation (genera)	70	Non-native Fish Species Collected:
-	general	40	Western Mosquitofish 108
JUNC		10	Centrarchids ⁴ BG 3
GRAM		20	Bullheads
TYPH		5	Common Carp
MYRI		30	Common Carp
SPAR		10	Other:
CHAR		1	T .
		NO	TE:
Site Name	ELIJAH BRISTOW S	MALL GRAVL PIT	Map Code EB15G
Basin	MIDDLE FORK WILLA	METTE RIVER	Sampling Date 5/3/2004
Subbasin	ELIJAH BRISTOW		UTM 10T 513883 4864404
Surface Are	a (m2)	105	Native Fish Species Collected:
Average De	pth (m)	0.5	Oregon Chub
		0.5 12	Oregon Chub Cottids
Water Temp	erature (C)		Cottids Speckled Dace
Water Temp Percent Silt	erature (C)	12	Cottids
Water Temp Percent Silt Types of a	erature (C) / Organics quatic vegetation ¹	12 100	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers
Water Temp Percent Silt Types of a Submerge	erature (C) / Organics quatic vegetation¹ ent	12 100 30	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers Sandrollers
Water Temp Percent Silt Types of a Submerge Emergent	erature (C) / Organics quatic vegetation¹ ent	12 100	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks
Water Temp Percent Silt Types of a Submerge Emergent Floating	erature (C) / Organics quatic vegetation¹ ent	12 100 30	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³
Water Temp Percent Silt Types of a Submerge Emergent	erature (C) / Organics quatic vegetation¹ ent	12 100 30	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks
Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	erature (C) / Organics quatic vegetation¹ ent	12 100 30 50	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³
Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	rerature (C) / Organics quatic vegetation¹ ent Total	12 100 30 50 80	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey
Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve GRAM	rerature (C) / Organics quatic vegetation¹ ent Total	12 100 30 50 80 30	CottidsSpeckled DaceRedside Shiners7Northern PikeminnowsLargescale SuckersSandrollersThreespine SticklebacksSalmonids ³ LampreyNon-native Fish Species Collected:
Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve GRAM ELOD	rerature (C) / Organics quatic vegetation¹ ent Total	12 100 30 50 80 30 20	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish
Submerge Emergent Floating Algae Aquatic Ve	rerature (C) / Organics quatic vegetation¹ ent Total	12 100 30 50 80 30	Cottids Speckled Dace Redside Shiners 7 Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish Centrarchids ⁴

NOTE:

Site Name		R BERRY SLOUGH		Map Code		EB1-9C
Basin	MIDDLE FORK WILLA	AMETTE RIVER		Sampling Da		5/3/2004
Subbasin	ELIJAH BRISTOW			UTM 10T	512968	4865334
Surface Are	ea (m2)	9610		Native Fisl	n Species C	ollected:
Average De	pth (m)	0.5		Oregon C	hub	258
Water Temp	erature (C)	16		Cottids		
Percent Silt		100		Speckled		3
	-			Redside		47
Types of a	quatic vegetation ¹				Pikeminnow le Suckers	/s 1
Submerg	ent	52		Sandrolle		
Emergent		20			ne Sticklebac	ks 13
Floating		25		Salmonid		KS 13
Algae				Lamprey	5	
	Total	97		Lamproy		
Aquatic Ve	egetation (genera)			Non-native	Fish Speci	ies Collected:
SPAR		10			Mosquitofis	sh
ELOD		50		Centrarc	hids ⁴ LB	5
GRAM		10		Bullhead	S	
LEMN		5		Commor	Carp	
NUPH		20		Other:		
POLY		2		etheri		
POLT		-				
			NOTE:		UGH DOWNS	STREAM EB10
Site Name Basin	ELIJAH BRISTOW N MIDDLE FORK WILLA ELIJAH BRISTOW	IORTH SLOUGH	NOTE:	LOWER SLO Map Code Sampling Da UTM 10T		EBN1F 5/3/2004
Site Name Basin Subbasin	MIDDLE FORK WILLA ELIJAH BRISTOW	IORTH SLOUGH	NOTE:	Map Code Sampling Da UTM 10T	ate	EBN1F 5/3/2004 4864608
Site Name Basin Subbasin Surface Are	MIDDLE FORK WILLA ELIJAH BRISTOW	IORTH SLOUGH Amette River	NOTE:	Map Code Sampling Da UTM 10T	ate 514931 n Species C	EBN1F 5/3/2004 4864608
Site Name Basin Subbasin Surface Are Average De	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m)	IORTH SLOUGH AMETTE RIVER 1800	NOTE:	Map Code Sampling Da UTM 10T Native Fisl	ate 514931 n Species C	EBN1F 5/3/2004 4864608 ollected:
Site Name Basin Subbasin Surface Are Average De Water Temp	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C)	IORTH SLOUGH AMETTE RIVER 1800 0.8 9	NOTE:	Map Code Sampling Da UTM 10T Native Fish Oregon C Cottids Speckled	ate 514931 n Species C Chub Dace	EBN1F 5/3/2004 4864608 ollected: 1336 24
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics	IORTH SLOUGH AMETTE RIVER 1800 0.8	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S	ate 514931 n Species C Shub Dace Shiners	EBN1F 5/3/2004 4864608 ollected: 1336 24 44
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C)	IORTH SLOUGH AMETTE RIVER 1800 0.8 9	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern	ate 514931 h Species C Chub Dace Shiners Pikeminnow	EBN1F 5/3/2004 4864608 ollected: 1336 24 44
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	IORTH SLOUGH AMETTE RIVER 1800 0.8 9	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern Largesca	ate 514931 Species C Chub Dace Shiners Pikeminnow le Suckers	EBN1F 5/3/2004 4864608 ollected: 1336 24 44
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	IORTH SLOUGH AMETTE RIVER 1800 0.8 9 100	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle	ate 514931 Species C Chub Dace Shiners Pikeminnow le Suckers rs	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 25 2
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	IORTH SLOUGH AMETTE RIVER 1800 0.8 9 100 40	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir	ate 514931 Species C Chub Dace Shiners Pikeminnow le Suckers ers he Sticklebac	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 25 2
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	IORTH SLOUGH AMETTE RIVER 1800 0.8 9 100 40 10	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids	ate 514931 Species C Chub Dace Shiners Pikeminnow le Suckers ers he Sticklebac	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 25 2
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	IORTH SLOUGH AMETTE RIVER 1800 0.8 9 100 40 10 50	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir	ate 514931 Species C Chub Dace Shiners Pikeminnow le Suckers ers he Sticklebac	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 25 2
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) berature (C) / Organics quatic vegetation ¹ ent	IORTH SLOUGH AMETTE RIVER 1800 0.8 9 100 40 10 50 <u>0</u>	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey	ate 514931 n Species C Shub Dace Shiners Pikeminnow le Suckers ors the Sicklebac S ³	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 25 2
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 1800 0.8 9 100 40 10 50 <u>0</u> 100	NOTE:	Map Code Sampling Da UTM 10T Native Fish Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey	ate 514931 n Species C Shub Dace Shiners Pikeminnow le Suckers ors the Sicklebac S ³	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 75 2 ks
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 1800 0.8 9 100 40 10 50 <u>0</u> 100 20	NOTE:	Map Code Sampling Da UTM 10T Native Fish Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey	ate 514931 Species C Chub Dace Shiners Pikeminnow le Suckers rs be Sticklebac s ³ Fish Spec Mosquitofis	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 75 2 ks
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve POTA NUPH	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	IORTH SLOUGH AMETTE RIVER 1800 0.8 9 100 40 10 50 <u>0</u> 100 20 50	NOTE:	Map Code Sampling Da UTM 10T Native Fish Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey Non-native	ate 514931 Species C chub Dace Shiners Pikeminnow le Suckers rs he Sticklebac s ⁻³ Fish Spec i Mosquitofis hids ⁴	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 75 2 ks
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 1800 0.8 9 100 40 10 50 <u>0</u> 100 20	NOTE:	Map Code Sampling Da UTM 10T Native Fish Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey Non-native	ate 514931 n Species C Shub Dace Shiners Pikeminnow le Suckers ors Sticklebac S ³ e Fish Spec i Mosquitofis hids ⁴ s	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 75 2 ks
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve POTA NUPH CARE	MIDDLE FORK WILLA ELIJAH BRISTOW ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 1800 0.8 9 100 40 10 50 <u>0</u> 100 20 50 5	NOTE:	Map Code Sampling Da UTM 10T Native Fisl Oregon C Cottids Speckled Redside S Northern Largesca Sandrolle Threespir Salmonids Lamprey Non-native Western Centrarc Bullhead	ate 514931 n Species C Shub Dace Shiners Pikeminnow le Suckers ors Sticklebac S ³ e Fish Spec i Mosquitofis hids ⁴ s	EBN1F 5/3/2004 4864608 ollected: 1336 24 44 75 2 ks

Site Name	FALL CREEK SPIL			Map Code			FCSP1-2K*	
Basin	MIDDLE FORK WILI	LAMETTE RIVER		Sampling E	Date		9/22/2004	
Subbasin	FALL CREEK			UTM 10 ⁻	T 5	19285	486	5320
Surface Are	ea (m2)	9063		Native Fis	sh Spec	ies Co	llected:	
Average De	pth (m)	0.5		Oregon	Chub			5849
Water Temp	erature (C)	18		Cottids				
Percent Silt	/ Organics	100		Speckle				1574
				Redside				
Types of a	quatic vegetation ¹			Northeri Largesc			3	
Submerge	ent	70		Sandroll		NCI3		
Emergent		14		Threesp		deback	s	
Floating		0		Salmoni		liobaon	•	
Algae		<u>0</u>		Lamprey				
	Total	89						
Aquatic Ve	egetation (genera)			Non-nativ	e Fish	Specie	es Collected	1:
ΡΟΤΑ		40			n Mosq	uitofish	1	
MYRI		30		Centrar				
SALI		2		Bullhea				
JUNC		2		Commo	on Carp			
ELEO		5		Other:				
GRAM		5						
GRAM TYPH Site Name		5 ID	NOTE:	Map Code		OPULA [.]	FP3N*	ΛTE
GRAM TYPH Site Name Basin	EAST FERRIN PON MIDDLE FORK WILL FERRIN CREEK	5 ID	NOTE:		Date	OPULA ⁻ 39093	FP3N* 9/20/2004	NTE 3507
GRAM TYPH Site Name Basin Subbasin	MIDDLE FORK WILI FERRIN CREEK	5 ID	NOTE:	Map Code Sampling E	Date T 5	39093	FP3N* 9/20/2004 484	
GRAM TYPH Site Name Basin Subbasin Surface Are	MIDDLE FORK WILL FERRIN CREEK a (m2)	5 ID LAMETTE RIVER	NOTE:	Map Code Sampling I UTM 10	Date T 5: sh Spec	39093	FP3N* 9/20/2004 484	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m)	5 ID LAMETTE RIVER 17000	NOTE:	Map Code Sampling E UTM 10 Native Fis	Date T 5: sh Spec	39093	FP3N* 9/20/2004 484	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C)	5 ID LAMETTE RIVER 17000 1.2 13	NOTE:	Map Code Sampling E UTM 10 Native Fis Oregon Cottids Speckle	Date T 5: sh Spec Chub d Dace	39093 i es Co	FP3N* 9/20/2004 484	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics	5 ID LAMETTE RIVER 17000 1.2	NOTE:	Map Code Sampling E UTM 10 Native Fis Oregon Cottids Speckle Redside	Date T 5: sh Spec Chub d Dace s Shiners	39093 ies Co	FP3N* 9/20/2004 484	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C)	5 ID LAMETTE RIVER 17000 1.2 13	NOTE:	Map Code Sampling E UTM 10 Native Fis Oregon Cottids Speckle Redside Norther	Date T 5: sh Spec Chub d Dace Shiners n Pikerr	39093 ies Co	FP3N* 9/20/2004 484	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	5 ID LAMETTE RIVER 17000 1.2 13	NOTE:	Map Code Sampling E UTM 10 Native Fis Oregon Cottids Speckle Redside Northern Largesc	Date T 5: sh Spec Chub d Dace Shiners n Pikerr ale Suc	39093 ies Co	FP3N* 9/20/2004 484	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	5 ID AMETTE RIVER 17000 1.2 13 95	NOTE:	Map Code Sampling E UTM 10 Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll	Date T 5: sh Spec Chub d Dace Shiners n Pikem rale Sucl lers	39093 i ies Co iinnows kers	FP3N* 9/20/2004 484 Illected:	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	5 ID AMETTE RIVER 17000 1.2 13 95 25	NOTE:	Map Code Sampling E UTM 10 Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp	Date T 5: sh Spec Chub d Dace Shiners n Pikem rale Suci lers ine Stick	39093 i ies Co iinnows kers	FP3N* 9/20/2004 484 Illected:	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	5 ID AMETTE RIVER 17000 1.2 13 95 25 70	NOTE:	Map Code Sampling E UTM 10 [°] Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp Salmonie	Date T 5: sh Spec Chub d Dace s Shiners n Pikerr ale Suc lers ine Stick ds ³	39093 i ies Co iinnows kers	FP3N* 9/20/2004 484 Illected:	
GRAM TYPH Site Name Basin Subbasin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	5 ID AMETTE RIVER 17000 1.2 13 95 25 70 5	NOTE:	Map Code Sampling E UTM 10 Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp	Date T 5: sh Spec Chub d Dace s Shiners n Pikerr ale Suc lers ine Stick ds ³	39093 i ies Co iinnows kers	FP3N* 9/20/2004 484 Illected:	
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	5 ID AMETTE RIVER 17000 1.2 13 95 25 70 5 0	NOTE	Map Code Sampling E UTM 10 [°] Native Fis Oregon Cottids Speckle Redside Norther Largesc Sandroll Threesp Salmonia Lamprey	Date T 5: sh Spec Chub d Dace Shiners n Pikerr ale Suc lers ine Stick ds ³ /	39093 ies Co innows kers kleback	FP3N* 9/20/2004 484 Illected:	3507
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	5 ID AMETTE RIVER 17000 1.2 13 95 25 70 5 0 100	NOTE:	Map Code Sampling I UTM 10 Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp Salmonia Lamprey Non-nativ	Date T 5: sh Spec Chub d Dace Shiners n Pikem cale Suc lers ine Stic ds ³ / / re Fish n Mosq	39093 ies Co iinnows kers kers kleback Specie uitofish	FP3N* 9/20/2004 484 Hected:	3507
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	5 ID AMETTE RIVER 17000 1.2 13 95 25 70 5 0	NOTE	Map Code Sampling E UTM 10 ⁻ Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp Salmonic Lamprey Non-nativ Wester Centrar	Date T 5: Sh Spec Chub d Dace Shiners n Pikem rale Such lers ine Stick ds ³ / re Fish n Mosq rchids ⁴	39093 ies Co iinnows kers kers kleback Specie uitofish	FP3N* 9/20/2004 484 Hected:	3507
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	5 AMETTE RIVER 17000 1.2 13 95 25 70 5 0 100 50	NOTE	Map Code Sampling I UTM 10 Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp Salmonia Lamprey Non-nativ	Date T 5: Sh Spec Chub d Dace Shiners n Pikem rale Such lers ine Stick ds ³ / re Fish n Mosq rchids ⁴	39093 ies Co iinnows kers kers kleback Specie uitofish	FP3N* 9/20/2004 484 Hected:	3507 1: 100
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve TYPH CHAR	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	5 AMETTE RIVER 17000 1.2 13 95 25 70 5 0 100 50 5 5 0 50 5	NOTE	Map Code Sampling E UTM 10 ⁻ Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp Salmonic Lamprey Non-nativ Wester Centrar	Date T 5: sh Spec Chub d Dace Shiners n Pikem ale Suci lers ine Stick ds ³ / re Fish n Mosq rchids ⁴ ds	39093 ies Co iinnows kers kers kleback Specie uitofish	FP3N* 9/20/2004 484 Hected:	3507 1: 100
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve TYPH CHAR POTA	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	5 AMETTE RIVER 17000 1.2 13 95 25 70 5 0 100 50 5 25 25	NOTE:	Map Code Sampling E UTM 10 ⁻ Native Fis Oregon Cottids Speckle Redside Northern Largesc Sandroll Threesp Salmonia Lamprey Non-nativ Wester Centrar Bullhea Commo	Date T 5: sh Spec Chub d Dace Shiners n Pikem ale Suci lers ine Stick ds ³ / re Fish n Mosq rchids ⁴ ds	39093 ies Co iinnows kers kers kleback Specie uitofish	FP3N* 9/20/2004 484 Hected:	3507 1: 100
GRAM TYPH Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ar Submerge Emergent Floating Algae Aquatic Ve TYPH CHAR POTA SCIR	MIDDLE FORK WILL FERRIN CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	5 AMETTE RIVER 17000 1.2 13 95 25 70 5 0 100 50 5 25 5 5	NOTE	Map Code Sampling E UTM 10 [°] Native Fis Oregon Cottids Speckle Redside Norther Largesc Sandroll Threesp Salmonia Lamprey Non-nativ Wester Centrar Bullhea	Date T 5: sh Spec Chub d Dace Shiners n Pikem ale Suci lers ine Stick ds ³ / re Fish n Mosq rchids ⁴ ds	39093 ies Co iinnows kers kers kleback Specie uitofish	FP3N* 9/20/2004 484 Hected:	3507 1: 100

Site Name HC	OSPITAL IMPOUND	MENT POND		Map Code		HI1K*	
Basin MI	DDLE FORK WILLAN	NETTE RIVER		Sampling Date		9/23/2004	
Subbasin				UTM 10T	533115	48515	17
Surface Area (m	12)	1768		Native Fish S	pecies Co	llected:	
Average Depth (m)	1		Oregon Chut	D		
Water Temperati	ure (C)	11.5		Cottids			16
Percent Silt / Org		95		Speckled Da			
Types of aquat	-			Redside Shir Northern Pil			11 1
	lic vegetation			Largescale S		1	I
Submergent		80		Sandrollers			
Emergent		15		Threespine S	Stickleback	S	
Floating				Salmonids ³			
Algae	Total	95		Lamprey			
Aquatic Vegeta		30		Non-native Fi	sh Snecic	s Collected:	
	ation (genera)						
MYRI		60		Western M Centrarchid		Ì	20
ELOD		20		Bullheads	DG LB		20
GRAM		10		Common Ca	Iro		
ELEO		5			" r		
				Other:			
			NOTE				
			NOTE:	HABITAT RESTO	DRATION F	ROJECT 1994	
Site Name HC	OSPITAL POND		NOTE:	Map Code	DRATION F	HSP1L	
	DSPITAL POND IDDLE FORK WILLAN	METTE RIVER	NOTE:		DRATION F		
Basin MI		METTE RIVER	NUTE:	Map Code	533115	HSP1L	67
Basin MI Subbasin	DDLE FORK WILLAN	METTE RIVER	NOTE:	Map Code Sampling Date	533115	HSP1L 4/12/2004 48515	67
Basin MI Subbasin Surface Area (m	DDLE FORK WILLAN		NOTE:	Map Code Sampling Date UTM 10T	533115 pecies Co	HSP1L 4/12/2004 48515	67 4943
Basin MI Subbasin Surface Area (m Average Depth (DDLE FORK WILLAN	4442	NOTE:	Map Code Sampling Date UTM 10T Native Fish S	533115 pecies Co	HSP1L 4/12/2004 48515	-
Basin MI Subbasin Surface Area (m Average Depth (Water Temperate	DDLE FORK WILLAM n2) m) ure (C)	4442 2 12	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da	533115 pecies Co	HSP1L 4/12/2004 48515 Ilected:	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org	DDLE FORK WILLAN n2) m) ure (C) ganics	4442 2	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chut Cottids Speckled Da Redside Shir	533115 pecies Co o ce ners	HSP1L 4/12/2004 48515	4943 3
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org	DDLE FORK WILLAN n2) m) ure (C) ganics	4442 2 12	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil	533115 pecies Co o ce ners keminnows	HSP1L 4/12/2004 48515	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org	DDLE FORK WILLAN n2) m) ure (C) ganics	4442 2 12	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S	533115 pecies Co o ce ners keminnows	HSP1L 4/12/2004 48515	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat	DDLE FORK WILLAN n2) m) ure (C) ganics	4442 2 12 100	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers	533115 pecies Co o ce ners keminnows Suckers	HSP1L 4/12/2004 48515	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent	DDLE FORK WILLAN n2) m) ure (C) ganics	4442 2 12 100 60	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S	533115 pecies Co o ce ners keminnows Suckers	HSP1L 4/12/2004 48515	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Emergent	DDLE FORK WILLAN n2) m) ure (C) ganics	4442 2 12 100 60 5	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S Salmonids ³	533115 pecies Co o ce ners keminnows Suckers	HSP1L 4/12/2004 48515	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Energent Floating	DDLE FORK WILLAN n2) m) ure (C) ganics	4442 2 12 100 60 5 15	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S	533115 pecies Co o ce ners keminnows Suckers	HSP1L 4/12/2004 48515	4943 3 4
Basin Mi Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Emergent Floating Algae	DDLE FORK WILLAN n2) m) ure (C) ganics tic vegetation ¹	4442 2 12 100 60 5 15 <u>0</u>	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S Salmonids ³	533115 pecies Co ce ners keminnows Suckers Stickleback	HSP1L 4/12/2004 48515 Ilected:	4943 3 4
Basin Mi Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Emergent Floating Algae Aquatic Vegeta	DDLE FORK WILLAN n2) m) ure (C) ganics tic vegetation ¹	4442 2 12 100 60 5 15 <u>0</u> 80	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	533115 pecies Co o ce ners ceeminnows Suckers Stickleback	HSP1L 4/12/2004 48515 Hected:	4943 3 4
Basin Mi Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Emergent Floating Algae Aquatic Vegeta GRAM	DDLE FORK WILLAN n2) m) ure (C) ganics tic vegetation ¹	4442 2 12 100 60 5 15 <u>0</u> 80 5	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	533115 pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofish	HSP1L 4/12/2004 48515 Hected:	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Emergent Floating Algae Aquatic Vegeta GRAM ELOD	DDLE FORK WILLAN n2) m) ure (C) ganics tic vegetation ¹	4442 2 12 100 60 5 15 <u>0</u> 80 5 60	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M	533115 pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofish	HSP1L 4/12/2004 48515 Hected:	4943 3 4
Basin Mi Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Emergent Floating Algae Aquatic Vegeta GRAM	DDLE FORK WILLAN n2) m) ure (C) ganics tic vegetation ¹	4442 2 12 100 60 5 15 <u>0</u> 80 5	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchids	533115 pecies Co o ce hers seminnows Suckers Stickleback sh Specie osquitofish s ⁴	HSP1L 4/12/2004 48515 Hected:	4943 3 4
Basin MI Subbasin Surface Area (m Average Depth (Water Temperatu Percent Silt / Org Types of aquat Submergent Emergent Floating Algae Aquatic Vegeta GRAM ELOD	DDLE FORK WILLAN n2) m) ure (C) ganics tic vegetation ¹	4442 2 12 100 60 5 15 <u>0</u> 80 5 60	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chut Cottids Speckled Da Redside Shir Northern Pił Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid Bullheads	533115 pecies Co o ce hers seminnows Suckers Stickleback sh Specie osquitofish s ⁴	HSP1L 4/12/2004 48515 Hected:	4943 3 4

MIDDLE FORK WILLAMETTE RIVER BASIN

Site Name Basin	IME M FK WILLAMETTE ISOL ISLAND PD MIDDLE FORK WILLAMETTE RIVER			F12 * 14/2004
Subbasin			UTM 10T 517250	4861650
Surface Are	a (m2)	330	Native Fish Species Colle	cted:
Average Dep	oth (m)	0.2	Oregon Chub	
Water Temp	erature (C)	17	Cottids	4
Percent Silt /	Organics	70	Speckled Dace Redside Shiners	25
Types of ac	quatic vegetation ¹		Northern Pikeminnows	
Submerge Emergent	ent	70 20	Largescale Suckers Sandrollers Threespine Sticklebacks	
Floating Algae	-		Salmonids ³ Lamprey	
	Total	90		
Aquatic Ve	getation (genera)		Non-native Fish Species C	Collected:
MYRI		40	Western Mosquitofish Centrarchids ⁴	100
ELOD		30	Bullheads	
SCIR CARE		10 10	Common Carp	
			Other:	

NOTE:

Site NameELIJAH BRISTOWBasinMIDDLE FORK WIL			Map CodeMF8B*Sampling Date9/14/2004
Subbasin	ELIJAH BRISTOW		UTM 10T 514043 4864334
Surface Are	a (m2)	11656	Native Fish Species Collected:
Average De	pth (m)	1	Oregon Chub 418
Water Temp	erature (C)	17	Cottids 16
Percent Silt	/ Organics	96	Speckled Dace 191 Redside Shiners 13
Types of a	quatic vegetation ¹		Northern Pikeminnows 2
Submerge Emergent Floating Algae		85 7 0 <u>0</u> 92	Largescale Suckers5SandrollersThreespine SticklebacksSalmonids 3Lamprey
Aquatic Ve	getation (genera)		Non-native Fish Species Collected:
MYRI ELOD CARE ELEO		50 30 5 2	Western Mosquitofish29Centrarchids ⁴ BG1Bullheads1Common Carp10
POTA		5	Other:
		1	NOTE: POPULATION ESTIMATE

Deala	M FK WILLAMETTE SIDE CHANL BW MIDDLE FORK WILLAMETTE RIVER				F9A*
Basin Subbasin		AVIETTE RIVER		Sampling Date 9/9 UTM 10T 511283	9/2004 4866938
<u> </u>	()				
Surface Are		840		Native Fish Species Collec	
Average De	pth (m)	0.3		Oregon Chub	0
Water Temp	erature (C)	18.5		Cottids	12
Percent Silt	/ Organics	70		Speckled Dace	80
Types of a	quatic vegetation ¹			Redside Shiners Northern Pikeminnows	11 1
Submerge	ent	34		Largescale Suckers	
Emergent		30		Sandrollers	
Floating				Threespine Sticklebacks Salmonids ³	
Algae					
	Total	64		Lamprey	
Aquatic Ve	getation (genera)			Non-native Fish Species C	Collected:
GRAM		10		Western Mosquitofish	2
MYRI		30		Centrarchids ⁴	
SPAR		10		Bullheads	
SALI		15		Common Carp	
ELEO		5		Other:	
ELOD		3		ethor:	
POTA		1	NOTE:		
Site Name	EAST FORK MINNO	W CREEK POND		Map Code M	NW1M*
Basin	EAST FORK MINNON MIDDLE FORK WILLA MINNOW CREEK				NW1M* 15/2004 4859624
Basin Subbasin	MIDDLE FORK WILLA MINNOW CREEK			Sampling Date 9/*	15/2004 4859624
Basin Subbasin Surface Are	MIDDLE FORK WILLA MINNOW CREEK a (m2)	AMETTE RIVER		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect	15/2004 4859624
Basin Subbasin Surface Are Average Dep	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m)	5000 0.5		Sampling Date 9/* UTM 10T 521411	15/2004 4859624 cted:
Average Dej Water Temp	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C)	5000 0.5 14.5		Sampling Date 9/* UTM 10T 521411 Native Fish Species Collect Oregon Chub	15/2004 4859624 cted:
Basin Subbasin Surface Are Average Dep Water Temp	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C)	5000 0.5		Sampling Date 9/ UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids	15/2004 4859624 cted: 3141
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C)	5000 0.5 14.5		Sampling Date 9/ UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows	15/2004 4859624 cted: 3141 954
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹	5000 0.5 14.5 100		Sampling Date 9/2 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers	15/2004 4859624 cted: 3141 954
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	5000 0.5 14.5		Sampling Date 9/7 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers	15/2004 4859624 cted: 3141 954
Basin Subbasin Surface Are Average Dep Water Temp Percent Silt Types of ac Submerge Emergent	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	5000 0.5 14.5 100 20		Sampling Date 9/ UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	15/2004 4859624 cted: 3141 954
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent Floating	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	5000 0.5 14.5 100 20 75		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³	15/2004 4859624 cted: 3141 954
Basin Subbasin Surface Are Average Dep Water Temp Percent Silt Types of ac Submerge Emergent	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	5000 0.5 14.5 100 20 75		Sampling Date 9/ UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	15/2004 4859624 cted: 3141 954
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	AMETTE RIVER 5000 0.5 14.5 100 20 75 5		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³	15/2004 4859624 cted: 3141 954 603
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	AMETTE RIVER 5000 0.5 14.5 100 20 75 5		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish	15/2004 4859624 cted: 3141 954 603
Basin Subbasin Surface Are Average Dep Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae Aquatic Ve	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	AMETTE RIVER 5000 0.5 14.5 100 20 75 5 100		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴	15/2004 4859624 cted: 3141 954 603
Basin Subbasin Surface Are Average Dep Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae Aquatic Ve	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	5000 0.5 14.5 100 20 75 5 100 20 20		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish	15/2004 4859624 cted: 3141 954 603
Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ac Submerge Emergent Floating Algae Aquatic Ve TYPH SALI	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	5000 0.5 14.5 100 20 75 5 100 20 20 20 20 20		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴	15/2004 4859624 cted: 3141 954 603
Basin Subbasin Surface Are Average Dep Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve TYPH SALI SPAR	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	5000 0.5 14.5 100 20 75 5 100 20 20 20 20 30		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴ Bullheads Common Carp	15/2004 4859624 cted: 3141 954 603
Basin Subbasin Surface Are Average Dep Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve TYPH SALI SPAR SCIR	MIDDLE FORK WILLA MINNOW CREEK a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	5000 0.5 14.5 100 20 75 5 100 20 20 20 20 30 5		Sampling Date 9/4 UTM 10T 521411 Native Fish Species Collect Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species C Western Mosquitofish Centrarchids ⁴ Bullheads	15/2004 4859624 cted: 3141 954 603

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GRAM 5 Bullheads	· · · · · · · · · · · · · · · · · · ·
0	
	rp
Other:	
NOTE: POPULATION ES	

	RATTLESNAKE CREE		Map Code		RTC1G*
Basin	MIDDLE FORK WILLAN	METTE RIVER	Sampling Date		9/16/2004
Subbasin	RATTLESNAKE CK		UTM 10T	508885	4868530
Surface Are	ea (m2)	1400	Native Fish S	pecies Coll	ected:
Average De	pth (m)	0.4	Oregon Chu	b	
Water Temp	erature (C)	15	Cottids		4
Percent Silt		50	Speckled Da	ace	9
	-	00	Redside Shi		27
Types of a	quatic vegetation ¹		Northern Pi		
Submerge	ent	30	Largescale Sandrollers	Suckers	
Emergent		42		Sticklobooko	22
Floating		20	Threespine Salmonids ³	Sticklebacks	23
Algae					
	Total	92	Lamprey		
Aquatic Ve	egetation (genera)		Non-native F	ish Species	Collected:
ELOD		20	Western M		
SPAR		10	Centrarchic	s ⁴	
LEMN		20	Bullheads		1
POTA		10	Common Ca	arp	
SCIR		2	Other:		
Site Name Basin	SHADY DELL POND MIDDLE FORK WILLAN	METTE RIVER	Map Code Sampling Date		SDP1M * 0/23/2004
	SHADY DELL POND MIDDLE FORK WILLAN	METTE RIVER	Map Code Sampling Date UTM 10T		SDP1M *)/23/2004 4848357
Basin	MIDDLE FORK WILLAN	METTE RIVER	 Sampling Date	536757	0/23/2004 4848357
Basin Subbasin	MIDDLE FORK WILLAN ea (m2)		 Sampling Date UTM 10T	536757 pecies Coll	0/23/2004 4848357
Basin Subbasin Surface Are Average De	MIDDLE FORK WILLAN ea (m2) pth (m)	2400 0.8	Sampling Date UTM 10T Native Fish S	536757 pecies Coll	3/23/2004 4848357 ected:
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Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MIDDLE FORK WILLAN ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	2400 0.8 13 100	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine	536757 pecies Coll b ace ners keminnows Suckers	a/23/2004 4848357 ected: 4210 2 135 402
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MIDDLE FORK WILLAN ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	2400 0.8 13 100 30 50	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine 3	536757 pecies Coll b ace ners keminnows Suckers	a/23/2004 4848357 ected: 4210 2 135 402
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MIDDLE FORK WILLAN ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	2400 0.8 13 100 30 50	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine	536757 pecies Coll b ace ners keminnows Suckers	a/23/2004 4848357 ected: 4210 2 135 402
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILLAN ea (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	2400 0.8 13 100 30 50 2	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine 3	536757 pecies Coll b ace ners keminnows Suckers Sticklebacks	3/23/2004 4848357 ected: 4210 2 135 402 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILLAN ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	2400 0.8 13 100 30 50 2	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine Salmonids ³ Lamprey	536757 pecies Coll b ace ners keminnows Suckers Sticklebacks ash Species	3/23/2004 4848357 ected: 4210 2 135 402 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve CARE	MIDDLE FORK WILLAN ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	2400 0.8 13 100 30 50 2 82	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine Salmonids ³ Lamprey	536757 pecies Coll b ace ners keminnows Suckers Sticklebacks ash Species losquitofish	3/23/2004 4848357 ected: 4210 2 135 402 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MIDDLE FORK WILLAN ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	2400 0.8 13 100 30 50 2 82 82 20	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine Salmonids ³ Lamprey Non-native Fi	536757 pecies Coll b ace ners keminnows Suckers Sticklebacks ash Species losquitofish	3/23/2004 4848357 ected: 4210 2 135 402 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve CARE SPAR	MIDDLE FORK WILLAN ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	2400 0.8 13 100 30 50 2 82 82 20 20	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine Salmonids ³ Lamprey Non-native Fi Western M Centrarchid	536757 pecies Coll b ace ners keminnows Suckers Sticklebacks ish Species losquitofish Is ⁴	3/23/2004 4848357 ected: 4210 2 135 402 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve CARE SPAR FONT	MIDDLE FORK WILLAN ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	2400 0.8 13 100 30 50 2 82 82 20 20 10	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine Salmonids ³ Lamprey Non-native Fi Western M Centrarchid Bullheads Common Ca	536757 pecies Coll b ace ners keminnows Suckers Sticklebacks ish Species losquitofish Is ⁴	3/23/2004 4848357 ected: 4210 2 135 402 2
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve CARE SPAR FONT LEMN	MIDDLE FORK WILLAN ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	2400 0.8 13 100 30 50 2 82 82 20 20 10 20 10 2	Sampling Date UTM 10T Native Fish S Oregon Chu Cottids Speckled Da Redside Shi Northern Pi Largescale Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchic Bullheads	536757 pecies Coll b ace ners keminnows Suckers Sticklebacks ish Species losquitofish Is ⁴	3/23/2004 4848357 ected: 4210 2 135 402 2

MIDDLE FORK WILLAMETTE RIVER BASIN

Site NameWALLACE SLOUGBasinMIDDLE FORK WILI		Map CodeWALLSampling Date9/7/20	-
Subbasin		UTM 10T 507160	4872225
Surface Area (m2)	3600	Native Fish Species Collected	1:
Average Depth (m)	1	Oregon Chub	
Water Temperature (C)	17	Cottids	3
Percent Silt / Organics	90	Speckled Dace Redside Shiners	9 24
Types of aquatic vegetation ¹		Northern Pikeminnows	
Submergent	30	Largescale Suckers Sandrollers	2
Emergent Floating	15 5	Threespine Sticklebacks Salmonids ³	20
Algae Total	50	Lamprey	
Aquatic Vegetation (genera)		Non-native Fish Species Coll	ected:
ELOD	25	Western Mosquitofish	
CARE	10	Centrarchids ⁴ BG	5
GRAM	5	Bullheads	
AZOL	5	Common Carp	
CALI	5	Other:	

NOTE:

Site Name Basin Subbasin	WICOPEE POND MIDDLE FORK WILLA SALT CREEK	METTE RIVER		:P1N* 3/2004 4838552
Surface Are	ea (m2)	3250	Native Fish Species Collec	ted:
Average De	pth (m)	1.2	Oregon Chub	4779
Water Temp	perature (C)	9	Cottids	
Percent Silt		100	Speckled Dace Redside Shiners	67
Types of a	quatic vegetation ¹		Northern Pikeminnows	
Submerge Emergent Floating		10 90	Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ CT	1
Algae	Total	100	Lamprey	I
Aquatic Ve	egetation (genera)		Non-native Fish Species Co	ollected:
SPAR TYPH SALI CARE		25 50 20 5	Western Mosquitofish Centrarchids ⁴ Bullheads Common Carp	
CABO		10	Other:	

NOTE: REINTROD SITE- POP ESTIMATE

Basin	BEAR CREEK MID-WILLAMETTE RIVER			Map Code Sampling Date	BEAR04041 * 10/7/2004
Subbasin	LONG TOM RIVER			UTM 10T 47708	4895953
Surface Are	ea (m2)	300		Native Fish Species	Collected:
Average De	pth (m)	0.2		Oregon Chub	
Water Temp	erature (C)	15.5		Cottids	
Percent Silt		50		Speckled Dace	
	-	50		Redside Shiners	
Types of a	quatic vegetation ¹			Northern Pikeminno	WS
Submerge	ent	0		Largescale Suckers	
Emergent		5		Sandrollers	
Floating		0		Threespine Stickleba	icks
Algae		<u>0</u>		Salmonids ³	
Ũ	Total	5		Lamprey	
Aquatic Ve	getation (genera)			Non-native Fish Spe	cies Collected:
GRAM		5		Western Mosquitor	ïsh
OINAM		5		Centrarchids ⁴ BG	6
				Bullheads	
				Common Carp	
				Other:	
			NOTE:	ODOT BRIDGE SITE	
Site Name	CALAPOOIA RIVER OVE	RELOW #9413		Map Code	CAL09413*
Basin	MID-WILLAMETTE RIVER			Sampling Date	10/12/2004
	CALAPOOIA RIVER			UTM 10T 48870	4934109
	CALAPOOIA RIVER			UTM 101 48870	5 4934109
Subbasin		10		Native Fish Species	
Subbasin Surface Are	a (m2)	10 0.05			
Subbasin Surface Are Average De	ea (m2) pth (m)			Native Fish Species Oregon Chub Cottids	
Subbasin Surface Are Average De Water Temp	ea (m2) pth (m) erature (C)	0.05 16		Native Fish Species Oregon Chub Cottids Speckled Dace	
Subbasin Surface Are Average De Water Temp Percent Silt	ra (m2) pth (m) erature (C) / Organics	0.05		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners	Collected:
Subbasin Surface Are Average De Water Temp Percent Silt	ea (m2) pth (m) erature (C)	0.05 16		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno	Collected:
Subbasin Surface Are Average De Water Temp Percent Silt	ea (m2) pth (m) erature (C) / Organics quatic vegetation¹	0.05 16		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers	Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers	Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba	Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³	Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50 0		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba	Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50 0 <u>0</u>		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³	Collected: ws acks
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50 0 <u>0</u> 50		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey	Collected: ws ucks cies Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50 0 <u>0</u>		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe	Collected: ws ucks cies Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50 0 <u>0</u> 50		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe Western Mosquitor	Collected: ws ucks cies Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50 0 <u>0</u> 50		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe Western Mosquitod Centrarchids ⁴	Collected: ws ucks cies Collected:
Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	ra (m2) pth (m) erature (C) / Organics quatic vegetation¹ ent	0.05 16 25 0 50 0 <u>0</u> 50		Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe Western Mosquitor Centrarchids ⁴ Bullheads	Collected: ws ucks cies Collected:

D ·				Map Code				09414*	
Basin	MID-WILLAMETTE RIVER	K		Sampling [100705		2/2004	
Subbasin	CALAPOOIA RIVER		,	JTM 10		488765	1	4934143	
Surface Are	ea (m2)	10	I	Native Fi	sh Sp	ecies C	ollecte	ed:	
Average De	pth (m)	0.05		Oregon	Chub				
Water Temp	erature (C)	16		Cottids					
Percent Silt / Organics 50			Speckle						
	-			Redside					
Types of a	quatic vegetation ¹			Norther			/S		
Submerge	ent	0		Largeso		JCKErS			
Emergent		50		Sandrol		iaklahaa	ko		
Floating		0		Threesp Salmoni		ICKIEDac	KS		
Algae		<u>0</u>		Lampre					
	Total	50		Lampre	у				
Aquatic Ve	egetation (genera)		1	Non-nativ	ve Fis	h Speci	ies Co	llected:	
GRAM		50		Wester	rn Mo	squitofis	sh		
				Centra	rchids	4			
				Bullhea					
				Commo	on Car	р			
			•	Other:			NO	FISH	
			NOTE: D	RY W/ SM	1 PUDI	DLES, DI	RY SLC	UGH NEARBY	
							CAL	12205*	
Site Name	CALAPOOLA RIVER #1	2205		vian Llone					
	CALAPOOIA RIVER #1 MID-WILLAMETTE RIVER			Map Code Sampling I				2/2004	
Basin	CALAPOOIA RIVER #1 MID-WILLAMETTE RIVER CALAPOOIA RIVER		:	Sampling I JTM 10	Date	488260	10/12	2/2004 4934520	
Basin	MID-WILLAMETTE RIVER		:	Sampling I	Date	488260	10/12		
Basin Subbasin	MID-WILLAMETTE RIVER CALAPOOIA RIVER		:	Sampling I	Date T		10/1:	4934520	
Basin Subbasin Surface Are	MID-WILLAMETTE RIVER CALAPOOIA RIVER a (m2)	8	:	Sampling I JTM 10	Date T sh Sp		10/1:	4934520	
Basin Subbasin Surface Are Average De	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m)	3800	:	Sampling I JTM 10 Native Fi	Date T sh Sp		10/1:	4934520	
Surface Are Average De Water Temp	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C)	3800 1	:	Sampling I JTM 10 Native Fin Oregon Cottids Speckle	Date T sh Sp Chub ed Dac	ecies C	10/1:	4934520 ed: 5 3	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics	3800 1 16	:	Sampling I JTM 10 Native Fin Oregon Cottids Speckle Redside	Date T sh Sp Chub ed Dac e Shine	ecies C e ers	10/1:	4934520 ed: 5 3 46	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C)	3800 1 16	:	Sampling I JTM 10 Native Fin Oregon Cottids Speckle Redside Norther	Date T sh Sp Chub ed Dac e Shine n Pike	ecies C e ers eminnow	10/1:	4934520 ed: 5 3 46 5	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	3800 1 16	:	Sampling I JTM 10 Native Fi Oregon Cottids Speckle Redside Norther Largeso	Date T sh Sp Chub ed Dac e Shine n Pike cale Si	ecies C e ers eminnow	10/1:	4934520 ed: 5 3 46	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3800 1 16 70	:	Sampling I JTM 10 Native Fi Oregon Cottids Speckle Redside Norther Largeso Sandrol	Date T sh Sp Chub ed Dac e Shine n Pike cale St llers	ecies C e ers eminnow uckers	10/1: ollecte	4934520 ed: 5 3 46 5	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3800 1 16 70 0	:	Sampling I JTM 10 Native Fi Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp	Date T sh Sp Chub ed Dac e Shine n Pike cale Su llers bine St	ecies C e ers eminnow uckers	10/1: ollecte	4934520 ed: 5 3 46 5	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3800 1 16 70 0 0	:	Sampling I JTM 10 Native Fi Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp Salmoni	Date T sh Sp Chub ed Dac e Shine n Pike cale Su llers bine St ids ³	ecies C e ers eminnow uckers	10/1: ollecte	4934520 ed: 5 3 46 5	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3800 1 16 70 0 0 0	:	Sampling I JTM 10 Native Fi Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp	Date T sh Sp Chub ed Dac e Shine n Pike cale Su llers bine St ids ³	ecies C e ers eminnow uckers	10/1: ollecte	4934520 ed: 5 3 46 5	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	3800 1 16 70 0 0 0 0 0 0		Sampling I JTM 10 Native Fi Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp Salmoni	Date T sh Sp Chub ed Dac e Shine cale Su llers bine St ids ³ y	ecies C e ers eminnow uckers icklebac	10/1: ollecte	4934520 ed: 5 3 46 5 2	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	3800 1 16 70 0 0 0 0 0 0		Sampling I JTM 10 Vative Fit Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp Salmoni Lampre	Date T sh Sp Chub ed Dace e Shine cale Su llers bine St ids ³ y ve Fis	ecies C e ers eminnow uckers icklebac	10/1: ollecte /s ks	4934520 ed: 5 3 46 5 2	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	3800 1 16 70 0 0 0 0 0 0		Sampling I JTM 10 Vative Fit Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp Salmoni Lampre	Date T sh Sp Chub ed Dace e Shine cale St llers bine St ids ³ y ve Fis rn Mo	ecies C e ers eminnow uckers icklebac h Speci squitofis	10/1: ollecte /s ks	4934520 ed: 5 3 46 5 2	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	3800 1 16 70 0 0 0 0 0 0		Sampling I JTM 10 Vative Fin Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp Salmoni Lampre Von-nativ	Date T sh Sp Chub ed Dac e Shine cale Su llers bine St ids ³ y ve Fis rn Mo rchids	ecies C e ers eminnow uckers icklebac h Speci squitofis	10/1: ollecte /s ks	4934520 ed: 5 3 46 5 2	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	3800 1 16 70 0 0 0 0 0 0		Sampling I JTM 10 Native Fit Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp Salmoni Lampre Non-nativ Wester Centra	Date T sh Sp Chub ed Dac e Shine on Pike cale Su llers bine St ids ³ y ve Fis rn Mo rchids ads	ecies C eers eminnow uckers icklebac h Speci squitofis ⁴ BG	10/1: ollecte /s ks	4934520 ed: 5 3 46 5 2	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIVER CALAPOOIA RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent Total	3800 1 16 70 0 0 0 0 0 0		Sampling I JTM 10 Native Fit Oregon Cottids Speckle Redside Norther Largeso Sandrol Threesp Salmoni Lampre Non-nativ Wester Centra Bullhea	Date T sh Sp Chub ed Dac e Shine on Pike cale Su llers bine St ids ³ y ve Fis rn Mo rchids ads	ecies C eers eminnow uckers icklebac h Speci squitofis ⁴ BG	10/1: ollecte /s ks	4934520 ed: 5 3 46 5 2	

Site Name				Map Code		DMUD6A*
Basin Subbasin	MID-WILLAMETTE RIVER EAST MUDDY CREEK			Sampling Date UTM 10T	494195	9/23/2004 4870794
Subbasin	EAST WODD'T CREEK				494195	4070794
Surface Are	a (m2)	128		Native Fish S	pecies Co	llected:
Average De	pth (m)	0.3		Oregon Chub)	1
Water Temp	erature (C)	17		Cottids		
Percent Silt		100		Speckled Da		77
	-	100		Redside Shir		16
Types of a	quatic vegetation ¹			Northern Pik		2
Submerge	ent	75		Largescale S Sandrollers	buckers	2
Emergent		5			tioklobook	00
Floating		10		Threespine S Salmonids ³	NICKIEDACK	s 98
Algae		<u>10</u>				
	Total	100		Lamprey		
Aquatic Ve	getation (genera)			Non-native Fig	sh Specie	es Collected:
ELOD		70		Western Mo	osquitofish	1
AZOL		5		Centrarchids	s ⁴	
LEMN		5		Bullheads		
GRAM		5		Common Ca	rp	
CALI		5		Other		
FILA		10		Other:		
			NOTE:	DAVE MALPASS	- PROP P	OWERPI ANT
				27.112.117.121.7.100		
Site Name	DUNN WETLAND DUNN2			Map Code		DUNN2K*
Basin	MID-WILLAMETTE RIVER			Map Code Sampling Date		DUNN2K* 9/27/2004
Basin				Map Code	470249	DUNN2K*
Basin Subbasin	MID-WILLAMETTE RIVER MARYS RIVER	2240		Map Code Sampling Date	470249	DUNN2K* 9/27/2004 4921916
Basin Subbasin Surface Are	MID-WILLAMETTE RIVER MARYS RIVER a (m2)	2240 0.7		Map Code Sampling Date UTM 10T	470249 Decies Co	DUNN2K* 9/27/2004 4921916
Basin Subbasin Surface Are Average De	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m)	-		Map Code Sampling Date UTM 10T Native Fish Sj	470249 Decies Co	DUNN2K* 9/27/2004 4921916
Basin Subbasin Surface Are Average De Water Temp	MID-WILLAMETTE RIVER MARYS RIVER ea (m2) pth (m) erature (C)	0.7 16.5		Map Code Sampling Date UTM 10T Native Fish Si Oregon Chub	470249 Decies Co	DUNN2K* 9/27/2004 4921916
Basin Subbasin Surface Are Average De Water Temp	MID-WILLAMETTE RIVER MARYS RIVER ea (m2) pth (m) erature (C)	0.7		Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir	470249 Decies Co D Ce Ders	DUNN2K* 9/27/2004 4921916 Illected: 17888
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIVER MARYS RIVER ea (m2) pth (m) erature (C)	0.7 16.5		Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da	470249 Decies Co D Ce Ders	DUNN2K* 9/27/2004 4921916 Illected: 17888
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹	0.7 16.5 100		Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir	470249 Decies Co Decies Co Dece see see see see see see see see see	DUNN2K* 9/27/2004 4921916 Illected: 17888
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60		Map Code Sampling Date UTM 10T Native Fish SJ Oregon Chub Cottids Speckled Da Redside Shir Northern Pik	470249 Decies Co Decies Co Dece see see see see see see see see see	DUNN2K* 9/27/2004 4921916 Illected: 17888
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40		Map Code Sampling Date UTM 10T Native Fish SI Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S	470249 Decies Co Decies Co Dece Ders Suckers	DUNN2K* 9/27/2004 4921916 Hected: 17888
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0		Map Code Sampling Date UTM 10T Native Fish Si Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers	470249 Decies Co Decies Co Dece Ders Suckers	DUNN2K* 9/27/2004 4921916 Hected: 17888
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u>		Map Code Sampling Date UTM 10T Native Fish Sj Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S	470249 Decies Co Decies Co Dece Ders Suckers	DUNN2K* 9/27/2004 4921916 Hected: 17888
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0		Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	470249 Decies Co Dece ners keminnows Suckers	DUNN2K [★] 9/27/2004 4921916 ***********************************
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u> 100		Map Code Sampling Date UTM 10T Native Fish SJ Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	470249 Decies Co Dece Ders Seceninnows Suckers Stickleback	DUNN2K ⁺ 9/27/2004 4921916 Mected: 17888 s s s s
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve POTA	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u> 100		Map Code Sampling Date UTM 10T Native Fish Si Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis	470249 Decies Co Decies Co Dece Secentianows Suckers Suckers Stickleback	DUNN2K ⁺ 9/27/2004 4921916 Mected: 17888 s s s s
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u> 100		Map Code Sampling Date UTM 10T Native Fish Sj Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Ma	470249 Decies Co Decies Co Dece Secentianows Suckers Suckers Stickleback	DUNN2K ⁺ 9/27/2004 4921916 Mected: 17888 s s s s
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve POTA	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u> 100		Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Ma Centrarchids Bullheads	470249 Decies Co Dece Secence Suckers Stickleback Stickleback	DUNN2K ⁺ 9/27/2004 4921916 Mected: 17888 s s s s
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve POTA CHAR	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u> 100 40 20		Map Code Sampling Date UTM 10T Native Fish Sj Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Ma	470249 Decies Co Dece Secence Suckers Stickleback Stickleback	DUNN2K ⁺ 9/27/2004 4921916 Mected: 17888 s s s s
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve POTA CHAR SPAR	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u> 100 40 20 5		Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Ma Centrarchids Bullheads	470249 Decies Co Dece Secence Suckers Stickleback Stickleback	DUNN2K ⁺ 9/27/2004 4921916 Mected: 17888 s s s s
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve POTA CHAR SPAR TYPH	MID-WILLAMETTE RIVER MARYS RIVER a (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	0.7 16.5 100 60 40 0 <u>0</u> 100 40 20 5 5 5		Map Code Sampling Date UTM 10T Native Fish Sj Oregon Chub Cottids Speckled Da Redside Shir Northern Pik Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fis Western Ma Centrarchids Bullheads Common Ca	470249 Decies Co Dece Secence Suckers Stickleback Stickleback	DUNN2K ⁺ 9/27/2004 4921916 Mected: 17888 s s s s

Site Name Basin	DUNN WETLAND DUNN6 MID-WILLAMETTE RIVER			Map C Sampl	Code ling Date			IN6F * /2004
Subbasin	MARYS RIVER			UTM	-	470249		4921836
Surface Area	a (m2)	3500		Nativ	e Fish S	pecies C	ollect	ed:
Average Dep	oth (m)	0.7		Ore	gon Chu	b		2116
Water Temp		18.5		Cot	tids			
				Spe	eckled Da	ace		
Percent Silt /	Organics	100		Rec	dside Shi	ners		
Types of ac	quatic vegetation ¹					keminnow	/S	
Submerge	ent	20			gescale	Suckers		
Emergent		40			ndrollers			
Floating		0				Sticklebac	ks	
Algae		<u>0</u>			monids ³			
	Total	60		Lan	nprey			
Aquatic Ve	getation (genera)			Non-r	native Fi	ish Speci	ies Co	llected:
ТҮРН		20				losquitofis	sh	
SPAR		20			ntrarchid	ls ⁴		
POTA		10		Bu	llheads			
CHAR		10		Co	mmon Ca	arp		
				Other	:			
			NOTE:	1998 R	EINTROE	DUCTION-	POP. E	STIMATE
Site Name	DUNN WETLAND DUNN7			Map C	Code		DUN	N7D*
Basin	MID-WILLAMETTE RIVER			Sampl	ing Date		9/27	/2004
Subbasin	MARYS RIVER			UTM	10T	470299)	4921916
Surface Area	a (m2)	880		Nativ	e Fish S	pecies C	ollect	ed:
Average Dep	oth (m)	0.3		Ore	gon Chu	b		5808
Water Temp	erature (C)	22		Cot	tids			
Percent Silt /		100		Spe	eckled Da	ace		
	-	100		Rec	dside Shi	ners		
Types of ac	quatic vegetation ¹					keminnow	/S	
Submerge	ent	15			gescale	Suckers		
Emergent		25			ndrollers			
Floating		_0				Sticklebac	ks	
Algae					monids ³			
0	Total	40		Lan	nprey			
Aquatic Ve	getation (genera)			Non-r	native F	ish Spec	ies Co	llected:
SPAR		5		We	estern M	losquitofis	sh	
POTA		15		Ce	ntrarchid	ls ⁴		
ELEO		10		Bu	llheads			
TYPH		10		Co	mmon Ca	arp		
				Other	:			
			NOTE:	PEINT		E- POP. ES		E

Site Name	FINLEY NWR DISPLAY POND MID-WILLAMETTE RIVER			Map Code FIN16L					
Basin Subbasin	MID-WILLAMETTE RI MARYS RIVER	VER		Sampi UTM	ing Date 10T	473386	5/14/2004 49171	20	
Subbasin				UTIVI	101	473300	49171	39	
Surface Area (m2) 6400				Native Fish Species Collected:					
Average Depth (m) 1.5			Oregon Chub				72		
Water Temperature (C) 16			Cottids						
Percent Silt / Organics 100			Speckled Dace						
-				Redside Shiners					
Types of aquatic vegetation ¹				Northern Pikeminnows Largescale Suckers					
Submergent		30		Sandrollers					
Emergent	Emergent 45			Sandrollers Threespine Sticklebacks					
Floating					nonids ³	NUCKIEDaCK			
Algae									
	Total	75		Laff	nprey				
Aquatic Ve	egetation (genera)			Non-r	native Fi	sh Specie	es Collected:		
MYRI		20				osquitofisl	n		
ELEO		20		Ce	ntrarchid	s ⁴			
POTA		10		Bu	llheads				
GRAM		10		Co	mmon Ca	rp			
TYPH		10		Other					
SPAR		5		other	•				
Site Name	FINLEY NWR BEAVE	R POND	NOTE:			STIMATE- F	FIN1H	E	
Basin	FINLEY NWR BEAVE MID-WILLAMETTE RI MARYS RIVER		NOTE:	Map C		671MATE- 1 473847			
Basin Subbasin	MID-WILLAMETTE RI' MARYS RIVER		NOTE:	Map C Sampl UTM	Code ing Date 10T	-	FIN1H 5/12/2004 49161		
Basin Subbasin Surface Are	MID-WILLAMETTE RI MARYS RIVER a (m2)	VER	NOTE:	Map C Sampl UTM Native	Code ing Date 10T	473847 pecies Co	FIN1H 5/12/2004 49161		
Basin Subbasin Surface Are Average De	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m)	VER 31559	NOTE:	Map C Sampl UTM Native	Code ing Date 10T e Fish S gon Chub	473847 pecies Co	FIN1H 5/12/2004 49161		
Basin Subbasin Surface Are Average De Water Temp	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) perature (C)	VER 31559 1.2 16	NOTE:	Map C Sampl UTM Native Ore Cott	Code ing Date 10T e Fish S gon Chub	473847 pecies Co	FIN1H 5/12/2004 49161		
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) eerature (C) / Organics	VER 31559 1.2	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec	Code ing Date 10T e Fish S gon Chub tids eckled Da dside Shir	473847 pecies Co ce ners	FIN1H 5/12/2004 49161	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) perature (C)	VER 31559 1.2 16	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor	Code ing Date 10T e Fish S gon Chut tids eckled Da dside Shir thern Pil	473847 pecies Co ce ners keminnows	FIN1H 5/12/2004 49161	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	VER 31559 1.2 16 100	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg	Code ing Date 10T e Fish S gon Chub tids eckled Da dside Shir thern Pil gescale S	473847 pecies Co ce ners keminnows	FIN1H 5/12/2004 49161	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	VER 31559 1.2 16 100 10	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg	Code ing Date 10T e Fish S gon Chub tids eckled Da dside Shir thern Pil gescale S adrollers	473847 pecies Co ce ners keminnows Suckers	FIN1H 5/12/2004 49161 Dilected:	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	VER 31559 1.2 16 100	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre	Code ing Date 10T e Fish S gon Chuk tids eckled Da dside Shir thern Pil gescale S odrollers eespine S	473847 pecies Co ce ners keminnows	FIN1H 5/12/2004 49161 Dilected:	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	VER 31559 1.2 16 100 10 70 0	NOTE	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thru Salr	Code ing Date 10T e Fish S gon Chut tids eckled Da dside Shir thern Pil gescale S indrollers eespine S monids ³	473847 pecies Co ce ners keminnows Suckers	FIN1H 5/12/2004 49161 Dilected:	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	VER 31559 1.2 16 100 10 70	NOTE:	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thru Salr	Code ing Date 10T e Fish S gon Chuk tids eckled Da dside Shir thern Pil gescale S odrollers eespine S	473847 pecies Co ce ners keminnows Suckers	FIN1H 5/12/2004 49161 Dilected:	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	VER 31559 1.2 16 100 10 70 0 <u>5</u>	NOTE	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thru Salr	Code ing Date 10T e Fish S gon Chut tids eckled Da dside Shir thern Pil gescale S indrollers eespine S monids ³ nprey	473847 pecies Co ce ners seminnow: Suckers	FIN1H 5/12/2004 49161 Dilected:	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae Aquatic Ve	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	VER 31559 1.2 16 100 10 70 0 <u>5</u> 85	NOTE	Map C Sampl UTM Native Ore Cottl Spe Rec Nor Larg San Thre Salr Lam	Code ing Date 10T e Fish S gon Chub tids eckled Da dside Shir thern Pil gescale S indrollers eespine S monids ³ aprey	473847 pecies Co ce ners seminnow: Suckers	FIN1H 5/12/2004 49161 bllected: s	39	
Average Dep Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELEO	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	VER 31559 1.2 16 100 10 70 0 5 85 50	NOTE	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg Non-r We	Code ing Date 10T e Fish S gon Chub tids eckled Da dside Shir thern Pil gescale S indrollers eespine S monids ³ aprey	473847 pecies Co ce ners seeminnows Suckers Stickleback	FIN1H 5/12/2004 49161 bllected: s	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve ELEO POTA	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	VER 31559 1.2 16 100 10 70 0 5 85 50 10	NOTE	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thre Salr Larg Salr Larg	Code ing Date 10T e Fish S gon Chuk tids eckled Da dside Shir thern Pil gescale S indrollers eespine S monids ³ nprey native Fi estern M	473847 pecies Co ce ners seeminnows Suckers Stickleback	FIN1H 5/12/2004 49161 bllected: s	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELEO POTA GRAM	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	VER 31559 1.2 16 100 10 70 0 5 85 50 10 20	NOTE	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thru Salr Lan Non-r We Ce Bu	Code ing Date 10T e Fish S gon Chuk tids eckled Da dside Shir thern Pil gescale S adrollers eespine S monids ³ nprey hative Fi estern M ntrarchids	473847 pecies Co ce ners keminnow: Suckers Stickleback sh Specie osquitofisl s ⁴	FIN1H 5/12/2004 49161 bllected: s	39	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve ELEO POTA	MID-WILLAMETTE RI MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	VER 31559 1.2 16 100 10 70 0 5 85 50 10	NOTE	Map C Sampl UTM Native Ore Cott Spe Rec Nor Larg San Thru Salr Lan Non-r We Ce Bu	Code ing Date 10T e Fish S gon Chuk tids eckled Da dside Shir thern Pil gescale S adrollers eespine S monids ³ nprey hative Fi estern M ntrarchids llheads mmon Ca	473847 pecies Co ce ners keminnow: Suckers Stickleback sh Specie osquitofisl s ⁴	FIN1H 5/12/2004 49161 bllected: s	39	

Site Name				Map Code FIN1I*						
Basin	MID-WILLAMETTE RIVER			Sampling Date 9/30/2004						
Subbasin	MARYS RIVER			UTM	10T	473847	4916139			
Surface Are	Surface Area (m2) 4514			Native Fish Species Collected:						
		0.5		Oregon Chub						
Water Temperature (C)		16		Cottids						
		100		Speckled Dace			1			
Types of aquatic vegetation ¹			Rec	2						
				Nor	S					
Submergent		57		Largescale Suckers Sandrollers						
-	Emergent 38									
Floating		0		Threespine Sticklebacks		s 381				
Algae		<u>0</u>		Salmonids ³						
J	Total	95		Lan	nprey					
Aquatic Vegetation (genera)				Non-native Fish Species Collected:						
ELEO		3		Western Mosquitofish			h			
POTA		50		Ce	ntrarchid	s ⁴				
GRAM		5		Bullheads						
CALI		5		Common Carp						
SPAR		25		Other						
POLY		20		Other	•					
JUNC		5	NOTE:	DOTEN	דו או אידי	RODUCTIO				
Site Name Basin Subbasin	FINLEY NWR BROWN MID-WILLAMETTE RIV MARYS RIVER			Map C Sampl UTM	ing Date 10T	474275	FIN25A* 9/30/2004 4918850			
Surface Are	a (m2)	2000		Nativo	e Fish S	pecies Co	ollected:			
Average Depth (m)		0.5		Oregon Chub						
Water Temperature (C)		18		Cottids						
		-		Speckled Dace						
Percent Silt / Organics 100			Redside Shiners							
Types of aquatic vegetation ¹				Northern Pikeminnows						
Submerg	ent	10		Lar	gescale \$	Suckers				
Emergent		20			drollers					
Floating		10				Stickleback	S			
Algae		<u>10</u>			nonids ³					
,	Total	40		Lan	nprey					
Aquatic Ve	egetation (genera)			Non-r	native Fi	sh Specie	es Collected:			
				Western Mosquitofish						
CALI 10				Centrarchids ⁴						
GRAM	ELEO 10 GRAM 10			Bullheads						
FILA		10		Common Carp						
		10		Other			NO FISH			
				POTENTIAL REINTRODUCTION SITE						
			NOTE:	POTEN	HAL REI	NIRODUC	HON SITE			

Site Name	-	I CK SOUTH POND		Map Co			FIN26A*	
Basin	MID-WILLAMETTE RIV	′ER		Samplir	-		9/30/2004	
Subbasin	MARYS RIVER			UTM	10T	474300	4918600	
Surface Are	ea (m2)	500		Native	Fish S	pecies Co	llected:	
Average De	pth (m)	0.1		Oreg	on Chub)		
Water Temp	erature (C)	18		Cottie	ds			
Percent Silt		100		Spec	kled Da	се		
	-	100		Reds	side Shir	ners		
Types of a	quatic vegetation ¹					eminnows	;	
Submerge	ent	0		0	escale S	Suckers		
Emergent		16			drollers			
Floating		0			espine 5 Ionids ³	tickleback	S	
Algae		<u>20</u>						
	Total	36		Lamp	brey			
Aquatic Ve	egetation (genera)			Non-na	ative Fi	sh Specie	es Collected:	
JUNC		5		Wes	stern Mo	osquitofish	1	
GRAM		10		Cen	trarchide	s ⁴		
FILA		20		Bull	heads			
ELEO		1		Com	nmon Ca	rp		
				Other:			NO FISH	
			NOTE:	POTENT	IAL REIN	ITRODUCT	ION SITE	
Site Name	FINLEY NWR CHEAD		NOTE:	POTENT Map Co		ITRODUCT	ION SITE	
Site Name Basin	FINLEY NWR CHEAD MID-WILLAMETTE RIV	LE POND	NOTE:		ode	ITRODUCT		
Basin		LE POND	NOTE:	Map Co	ode	1TRODUCT 475856	FIN27C	
Basin Subbasin	MID-WILLAMETTE RIV MARYS RIVER	LE POND	NOTE:	Map Co Samplir UTM	ode ng Date 10T		FIN27C 5/12/2004 4915761	
Basin Subbasin Surface Are	MID-WILLAMETTE RIV MARYS RIVER ea (m2)	LE POND /ER	NOTE:	Map Co Samplir UTM Native	ode ng Date 10T	475856 Decies Co	FIN27C 5/12/2004 4915761	
Basin Subbasin Surface Are Average De	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m)	LE POND ÆR 8142	NOTE:	Map Co Samplir UTM Native	ode ng Date 10T Fish Sj ion Chub	475856 Decies Co	FIN27C 5/12/2004 4915761	
Basin Subbasin Surface Are Average De Water Temp	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C)	LE POND /ER 8142 1.5 18.5	NOTE:	Map Co Samplir UTM Native Oreg Cottic	ode ng Date 10T Fish Sj ion Chub	475856 Decies Co	FIN27C 5/12/2004 4915761	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C) / Organics	LE POND /ER 8142 1.5	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec	ode ng Date 10T Fish Sj on Chuk	475856 Decies Co	FIN27C 5/12/2004 4915761	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C)	LE POND /ER 8142 1.5 18.5	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds	ode ng Date 10T Fish Sj on Chub ds ckled Da side Shir	475856 Decies Co	FIN27C 5/12/2004 4915761 Illected: 217	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	LE POND /ER 8142 1.5 18.5 100	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North	ode ng Date 10T Fish Sj on Chub ds ckled Da side Shir	475856 Decies Co Decies Co Dece Mers Reminnows	FIN27C 5/12/2004 4915761 Illected: 217	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	LE POND /ER 8142 1.5 18.5 100 15	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sand	ode ng Date 10T Fish Sj on Chub ds ckled Da side Shir hern Pik escale S drollers	475856 Decies Co Dece Ders Ce Ders Suckers	FIN27C 5/12/2004 4915761 Illected: 217	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	LE POND /ER 8142 1.5 18.5 100	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sano Three	ode ng Date 10T Fish Sj on Chuk ds ckled Da side Shir hern Pik escale S drollers espine S	475856 Decies Co Decies Co Dece Mers Reminnows	FIN27C 5/12/2004 4915761 Illected: 217	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	LE POND /ER 8142 1.5 18.5 100 15	NOTE:	Map Co Samplir UTM Native Oreg Cottic Spec Reds North Larg Sanc Three Salm	ode ng Date 10T Fish Sp on Chub ds kled Da side Shir hern Pik escale S drollers espine S onids ³	475856 Decies Co Dece Ders Ce Ders Suckers	FIN27C 5/12/2004 4915761 Illected: 217	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	LE POND /ER 8142 1.5 18.5 100 15	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sano Three	ode ng Date 10T Fish Sp on Chub ds kled Da side Shir hern Pik escale S drollers espine S onids ³	475856 Decies Co Dece Ders Ce Ders Suckers	FIN27C 5/12/2004 4915761 Illected: 217	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) herature (C) / Organics quatic vegetation¹ ent	LE POND /ER 8142 1.5 18.5 100 15 71	NOTE:	Map Co Samplir UTM Native Oreg Cottic Spec Reds North Larg Sano Three Salm Lamp	ode ng Date 10T Fish Sp on Chub ds kled Da side Shir hern Pik escale S drollers espine S onids ³ orey	475856 Decies Co Dece ners ce ners ce ce ners ce ce ners ce ce tickleback	FIN27C 5/12/2004 4915761 Illected: 217	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	LE POND /ER 8142 1.5 18.5 100 15 71 86	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sano Three Salm Lamp	ode ng Date 10T Fish Sj on Chub ds ckled Da side Shir hern Pik escale S drollers espine S onids ³ orey	475856 Decies Co Dece ners ce ners ce ce ners ce ce ners ce ce tickleback	FIN27C 5/12/2004 4915761 Illected: 217 S	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve CARE	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	LE POND /ER 8142 1.5 18.5 100 15 71 86 86 5	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sand Three Salm Lamp Non-na	ode ng Date 10T Fish Sj on Chub ds ckled Da side Shir hern Pik escale S drollers espine S onids ³ orey	475856 Decies Co Decies Co Dece Secens Suckers Suckers Stickleback	FIN27C 5/12/2004 4915761 Illected: 217 S	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve CARE GRAM	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	LE POND /ER 8142 1.5 18.5 100 15 71 86 5 20	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sanc Three Salm Lamp Non-na Wes Cen	ode ng Date 10T Fish Sj on Chub ds ckled Da side Shir hern Pik escale S drollers espine S onids ³ orey ative Fis	475856 Decies Co Decies Co Dece Secens Suckers Suckers Stickleback	FIN27C 5/12/2004 4915761 Illected: 217 s s s	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve CARE GRAM TYPH	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	LE POND /ER 8142 1.5 18.5 100 15 71 86 5 20 25	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sano Three Salm Lamp Non-na Wes Cen Bull	ode ng Date 10T Fish Sy on Chub ds kled Da side Shir hern Pik escale S drollers espine S onids ³ orey ative Fis stern Metrarchids	475856 Decies Co Dece Mers Reminnows Suckers Stickleback	FIN27C 5/12/2004 4915761 Illected: 217 s s s	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve CARE GRAM TYPH ELOD	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	LE POND VER 8142 1.5 18.5 100 15 71 86 5 20 25 10	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Large Sanc Three Salm Lamp Non-na Wes Cen Bull Corr	ode ng Date 10T Fish Si on Chub ds kled Da side Shir hern Pik escale S drollers espine S onids ³ orey ative Fis stern Me trarchids heads mon Ca	475856 Decies Co Dece Mers Reminnows Suckers Stickleback	FIN27C 5/12/2004 4915761 Illected: 217 s s s	
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve CARE GRAM TYPH	MID-WILLAMETTE RIV MARYS RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent Total	LE POND /ER 8142 1.5 18.5 100 15 71 86 5 20 25	NOTE:	Map Co Samplir UTM Native Oreg Cottio Spec Reds North Larg Sano Three Salm Lamp Non-na Wes Cen Bull	ode ng Date 10T Fish Si on Chub ds kled Da side Shir hern Pik escale S drollers espine S onids ³ orey ative Fis stern Me trarchids heads mon Ca	475856 Decies Co Dece Mers Reminnows Suckers Stickleback	FIN27C 5/12/2004 4915761 Illected: 217 s s s	

Site Name	FINLEY FIELD 22 LO			Map Code		FIN28	
Basin	MID-WILLAMETTE R	IVER		Sampling Date		5/12/2004	
Subbasin	MARYS RIVER			UTM 10T	474073	4917569	
Surface Are	ea (m2)	14222		Native Fish Sp	ecies Co	llected:	
Average De	pth (m)	0.8		Oregon Chub			
Water Temp	erature (C)	17		Cottids			
Percent Silt		100		Speckled Dac	e		
	-	100		Redside Shine	ers		
Types of a	quatic vegetation ¹			Northern Pike			
Submerge	ent	3		Largescale S	uckers		
Emergent		24		Sandrollers	:		
Floating				Threespine St Salmonids ³	ICKIEDACKS	6	
Algae							
	Total	27		Lamprey			
Aquatic Ve	getation (genera)			Non-native Fis	h Specie	s Collected:	
ELEO		15		Western Mo			
POTA		2		Centrarchids	4		
CARE		2		Bullheads			
SPAR		4		Common Car	р		
MENT		1		Other:		NO FISH	
00444		1					
GRAM							
CALI	FINI FY NWR- GRA	2 X CREEK SWAMP	NOTE:	POTENTIAL INTRO	ODUCTION		
CALI Site Name Basin	FINLEY NWR- GRA MID-WILLAMETTE R MARYS RIVER	Y CREEK SWAMP	NOTE:	POTENTIAL INTRO Map Code Sampling Date UTM 10T	2DUCTION 472649	N SITE FIN4K 5/14/2004 4915908	
CALI Site Name Basin Subbasin	MID-WILLAMETTE R MARYS RIVER	Y CREEK SWAMP	NOTE:	Map Code Sampling Date	472649	FIN4K 5/14/2004 4915908	
CALI Site Name Basin Subbasin Surface Are	MID-WILLAMETTE R MARYS RIVER ea (m2)	Y CREEK SWAMP IVER	NOTE:	Map Code Sampling Date UTM 10T	472649	FIN4K 5/14/2004 4915908	
CALI Site Name Basin Subbasin Surface Are Average De	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m)	Y CREEK SWAMP IVER 22872	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp	472649	FIN4K 5/14/2004 4915908 Ilected:	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C)	Y CREEK SWAMP IVER 22872 1 14	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub	472649 ecies Co	FIN4K 5/14/2004 4915908 Ilected: 523	
CALI Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) eerature (C) / Organics	Y CREEK SWAMP IVER 22872 1	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids	472649 ecies Co e	FIN4K 5/14/2004 4915908 Ilected: 523 6	
CALI Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C)	Y CREEK SWAMP IVER 22872 1 14	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike	472649 ecies Co ee ers eminnows	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	Y CREEK SWAMP IVER 22872 1 14 100	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St	472649 ecies Co ee ers eminnows	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale So Sandrollers	472649 ecies Co ee ers eminnows uckers	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St	472649 ecies Co ee ers eminnows uckers icklebacks	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³	472649 ecies Co ee ers eminnows uckers	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St	472649 ecies Co ee ers eminnows uckers icklebacks	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) herature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35 65	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³	472649 ecies Co e ers eminnows uckers icklebacks CT	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117 s 169 1	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35 65	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shind Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey	472649 ecies Co ee ers eminnows uckers icklebacks CT h Specie	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117 s 169 1 s Collected:	
CALI Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae Aquatic Ve POTA	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35 65 100	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dace Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis	472649 ecies Co ere ers eminnows uckers icklebacks CT h Specie squitofish	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117 s 169 1 s Collected:	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae Aquatic Ve	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35 65 100 55	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mo	472649 ecies Co ere ers eminnows uckers icklebacks CT h Specie squitofish	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117 s 169 1 s Collected:	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a d Submerge Emergent Floating Algae Aquatic Ve POTA JUNC	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35 65 100 55 5	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mo Centrarchids	472649 ecies Co ers eminnows uckers icklebacks CT h Specie squitofish ⁴ BG	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117 s 169 1 s Collected:	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve POTA JUNC CARE	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35 65 100 55 5 5 5 5	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mo Centrarchids Bullheads Common Car	472649 ecies Co ers eminnows uckers icklebacks CT h Specie squitofish ⁴ BG	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117 s 169 1 s Collected:	
CALI Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve POTA JUNC CARE TYPH	MID-WILLAMETTE R MARYS RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	Y CREEK SWAMP IVER 22872 1 14 100 35 65 100 55 5 5 5 5 5 5	NOTE:	Map Code Sampling Date UTM 10T Native Fish Sp Oregon Chub Cottids Speckled Dac Redside Shine Northern Pike Largescale St Sandrollers Threespine St Salmonids ³ Lamprey Non-native Fis Western Mo Centrarchids Bullheads	472649 ecies Co ers eminnows uckers icklebacks CT h Specie squitofish ⁴ BG	FIN4K 5/14/2004 4915908 Ilected: 523 6 1016 1117 s 169 1 s Collected:	

Site Name	JAMPOLSKY PONDS			Map C			JAMP1-2B
Basin	MID-WILLAMETTE RIVER				ng Date		5/23/2004
Subbasin	LONG TOM RIVER			UTM	10T	480250	4890908
Surface Area	a (m2)	10000		Native	Fish S	pecies Co	ollected:
Average Dep	oth (m)	1		Oreg	gon Chul)	
Water Tempe	erature (C)	16		Cotti	ds		
Percent Silt /		100		Spe	ckled Da	се	
		100		Red	side Shir	ners	
Types of aq	luatic vegetation ¹					keminnow	5
Submerge	ent	11			escale S	Suckers	
Emergent		8			drollers	Malalah a al	
Floating					espine a nonids ³	Stickleback	S
Algae		<u>20</u>					
	Total	39		Lam	prey		
Aquatic Ve	getation (genera)			Non-n	ative Fi	sh Specie	es Collected:
ALIS		3				osquitofisl	ı
ELEO		5		Cer	ntrarchid	s ⁴	
LUDW		5		Bull	heads		
ELOD		3		Cor	nmon Ca	rp	
POTA		1		Other			NO FISH
RANU		2					
FILA		20	NOTE:	POTEN	FIAL INTF	RODUCTIO	N SITE
Site Name				Map C			JAMP1-2C*
Basin	MID-WILLAMETTE RIVER			UTM	ng Date 10T	100000	9/29/2004
Subbasin	LONG TOM RIVER			UTIVI	101	480282	4890921
Surface Area	a (m2)	6368		Native	Fish S	pecies Co	ollected:
Average Dep	oth (m)	0.6		Oreç	gon Chub)	
Water Tempe	erature (C)	17.5		Cotti	ds		
· · · · ·		100			ckled Da		
Percent Silt /				Red	side Shir	ners	
	-						
	luatic vegetation ¹			Nort		eminnow	8
Types of aq	juatic vegetation ¹	35		Nort Larg	escale S		5
	juatic vegetation ¹	35 2		Nort Larg Sane	escale S drollers	Suckers	
Submerge	juatic vegetation ¹			Nort Larg San Thre	escale S drollers espine S		
Types of aq Submerge Emergent	juatic vegetation ¹			Nort Larg Sand Thre Salm	escale S drollers espine S nonids ³	Suckers	
Types of aq Submerge Emergent Floating	juatic vegetation ¹			Nort Larg San Thre	escale S drollers espine S nonids ³	Suckers	
Types of aq Submerge Emergent Floating Algae	juatic vegetation ¹	2		Nort Larg San Thre Salm Lam	Jescale S drollers eespine S nonids ³ prey	Suckers Stickleback	
Types of aq Submerge Emergent Floating Algae	Juatic vegetation¹ ent Total	2 37		Nort Larg San Thre Salm Lam Non-n We	escale S drollers espine S nonids ³ prey ative Fi stern M	Suckers Stickleback sh Speci o osquitofisl	s es Collected:
Types of aq Submerge Emergent Floating Algae Aquatic Veg ALIS	Juatic vegetation¹ ent Total	2 37 2		Nort Larg San Thre Salm Lam Non-n We	escale S drollers espine S nonids ³ prey ative Fi	Suckers Stickleback sh Speci o osquitofisl	s es Collected:
Types of aq Submerge Emergent Floating Algae Aquatic Veg ALIS POTA	Juatic vegetation¹ ent Total	2 37		Nort Larg San Thre Saln Lam Non-n We Cer	escale S drollers espine S nonids ³ prey ative Fi stern M	Suckers Stickleback sh Speci o osquitofisl	s es Collected:
Types of aq Submerge Emergent Floating Algae Aquatic Veg ALIS	Juatic vegetation¹ ent Total	2 37 2 25		Nort Larg Sand Thre Salm Lam Non-n We Cer Bull	escale S drollers espine S nonids ³ prey ative Fi stern M ntrarchide	Suckers Stickleback sh Speci o osquitofisl s ⁴	s es Collected:
Types of aq Submerge Emergent Floating Algae Aquatic Veg ALIS POTA	Juatic vegetation¹ ent Total	2 37 2 25		Nort Larg Sand Thre Salm Lam Non-n We Cer Bull	escale S drollers espine S nonids ³ prey ative Fi stern M htrarchid: heads nmon Ca	Suckers Stickleback sh Speci o osquitofisl s ⁴	s es Collected:

Site Name	LINGO SLOUGH			Map Code		LINGO1	
Basin	MID-WILLAMETTE RIVER			Sampling Date	470550	7/19/2004	0000
Subbasin	LONG TOM RIVER			UTM 10T	478552	489	2969
Surface Are	ea (m2)	480		Native Fish S	pecies Co	llected:	
Average De	pth (m)	0.2		Oregon Chul	D		
Water Temp	erature (C)	24		Cottids			
Percent Silt	/ Organics	95		Speckled Da			
	C .			Redside Shi			
Types of a	quatic vegetation ¹			Northern Pil		6	
Submerg	ent	90		Sandrollers	Juckers		
Emergent		5		Threespine S	Stickleback	s	
Floating				Salmonids ³		-	
Algae				Lamprey			
	Total	95					
Aquatic Ve	egetation (genera)			Non-native Fi			d:
GRAM		80		Western M		ı	
SALI		5		Centrarchid	S [≄]		
FRAX		3		Bullheads			_
MYRI		5		Common Ca	ırp		9
SOLA		2		Other:		GF	
			NOTE:	BRIDGE REPLAC	EMENT PR		
Sito Namo							
		RIDGE XING		Map Code		LMUD2	
Basin	MID-WILLAMETTE RIVER	RIDGE XING		Map Code Sampling Date		LMUD2 5/17/2004	8441
Basin		RIDGE XING		Map Code	491465	LMUD2 5/17/2004	8441
Basin Subbasin	MID-WILLAMETTE RIVER EAST MUDDY CREEK	ARIDGE XING		Map Code Sampling Date	491465	LMUD2 5/17/2004 490	8441
Basin Subbasin Surface Are	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2)			Map Code Sampling Date UTM 10T	491465 pecies Co	LMUD2 5/17/2004 490	8441
Basin Subbasin Surface Are Average De	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m)	490		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids	491465 pecies Co	LMUD2 5/17/2004 490	8441
Basin Subbasin Surface Are Average De Water Temp	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C)	490 0.3		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da	491465 pecies Cc	LMUD2 5/17/2004 490	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics	490 0.3 18		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shir	491465 pecies Co o ce ners	LMUD2 5/17/2004 490	15
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C)	490 0.3 18		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil	491465 pecies Co o ce ners keminnows	LMUD2 5/17/2004 490	
Basin Subbasin Surface Are Average De Water Temp Percent Silt	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	490 0.3 18		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S	491465 pecies Co o ce ners keminnows	LMUD2 5/17/2004 490	15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S Sandrollers	491465 pecies Co ce ners keminnows Suckers	LMUD2 5/17/2004 490	15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S	491465 pecies Co ce ners keminnows Suckers	LMUD2 5/17/2004 490	15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S Sandrollers Threespine S Salmonids ³	491465 pecies Co ce ners keminnows Suckers	LMUD2 5/17/2004 490	15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70 10		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S	491465 pecies Co ce ners keminnows Suckers	LMUD2 5/17/2004 490	15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) berature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70 10 <u>5</u>		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S Sandrollers Threespine S Salmonids ³	491465 pecies Co ce ners keminnows Suckers Stickleback	LMUD2 5/17/2004 490 billected:	15 3
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70 10 <u>5</u>		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Piil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M	491465 pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofish	LMUD2 5/17/2004 490 ollected:	15 3
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70 10 <u>5</u> 85		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Piil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	491465 pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofish	LMUD2 5/17/2004 490 ollected:	15 3
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70 10 <u>5</u> 85 20		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Piil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M	491465 pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofish	LMUD2 5/17/2004 490 ollected:	15 3
Submerg Emergent Floating Algae Aquatic Ve ELOD POTA	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70 10 <u>5</u> 85 20 40		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid	491465 pecies Co ce hers seminnows Stickleback Stickleback sh Specie osquitofish s ⁴	LMUD2 5/17/2004 490 ollected:	15 3
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve ELOD POTA GRAM	MID-WILLAMETTE RIVER EAST MUDDY CREEK ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	490 0.3 18 25 70 10 <u>5</u> 85 20 40 10		Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid Bullheads	491465 pecies Co ce hers seminnows Stickleback Stickleback sh Specie osquitofish s ⁴	LMUD2 5/17/2004 490 ollected:	15 3

Site Name	LITTLE MUDDY TRIB BRI	DGE XING		Map Code	LMUDT1
Basin	MID-WILLAMETTE RIVER			Sampling Date	5/17/2004
Subbasin	EAST MUDDY CREEK			UTM 10T 491064	4907447
Surface Are	a (m2)	400		Native Fish Species C	ollected:
Average De	oth (m)	0.4		Oregon Chub	5
Water Temp	erature (C)	18		Cottids	
Percent Silt	/ Organics	60		Speckled Dace	2
	-			Redside Shiners Northern Pikeminnow	7
Types of a	quatic vegetation ¹			Largescale Suckers	5
Submerge		30		Sandrollers	
Emergent		30		Threespine Sticklebacl	(S
Floating				Salmonids ³	
Algae	Total	60		Lamprey	
	Total	60		New notive Fick Crossi	an Callestad
Aquatic ve	getation (genera)			Non-native Fish Speci	
GRAM		30		Western Mosquitofis	h 28
ELOD		30		Centrarchids ⁴	
		0		Bullheads	
				Common Carp	
				Other:	
			NOTE:	ODOT BRIDGE CROSSING	i
Site Name	LONG TOM RANCH			Map Code	LTR1D
Basin	MID-WILLAMETTE RIVER			Sampling Date	5/20/2004
Subbasin	LONG TOM RIVER			UTM 10T 479151	4897535
Surface Are	a (m2)	4000		Native Fish Species C	ollected:
Average De		1.8		Oregon Chub	
	otn (m)				
Water Temp		23		Cottids	
	erature (C)	23		Speckled Dace	
Percent Silt	erature (C) / Organics			Speckled Dace Redside Shiners	
Percent Silt	erature (C)	23		Speckled Dace Redside Shiners Northern Pikeminnow	s
Percent Silt	erature (C) / Organics quatic vegetation ¹	23		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers	s
Percent Silt Types of a	erature (C) / Organics quatic vegetation ¹ ent	23 100		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers	
Percent Silt Types of a Submerge	erature (C) / Organics quatic vegetation ¹ ent	23 100 32		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Sticklebacl	
Percent Silt Types of a Submerge Emergent	erature (C) / Organics quatic vegetation ¹ ent	23 100 32		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³	
Percent Silt Types of a Submerge Emergent Floating	erature (C) / Organics quatic vegetation ¹ ent	23 100 32		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Sticklebacl	
Percent Silt Types of au Submerge Emergent Floating Algae	erature (C) / Organics quatic vegetation ¹ ent	23 100 32 17		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³	٢S
Percent Silt Types of au Submerge Emergent Floating Algae	erature (C) / Organics quatic vegetation ¹ ent Total	23 100 32 17		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³ Lamprey Non-native Fish Speci Western Mosquitofis	«s es Collected:
Percent Silt Types of ad Submerget Emergent Floating Algae Aquatic Ve	erature (C) / Organics quatic vegetation ¹ ent Total	23 100 32 17 49		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³ Lamprey Non-native Fish Speci Western Mosquitofis Centrarchids ⁴	«s es Collected:
Percent Silt Types of ad Submerge Emergent Floating Algae Aquatic Ve POLY	erature (C) / Organics quatic vegetation ¹ ent Total	23 100 32 17 49 5		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³ Lamprey Non-native Fish Speci Western Mosquitofis	«s es Collected:
Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve POLY SALI	erature (C) / Organics quatic vegetation ¹ ent Total	23 100 32 17 49 5 10		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³ Lamprey Non-native Fish Speci Western Mosquitofis Centrarchids ⁴	«s es Collected:
Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve POLY SALI RANU	erature (C) / Organics quatic vegetation ¹ ent Total	23 100 32 17 49 5 10 20		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³ Lamprey Non-native Fish Speci Western Mosquitofis Centrarchids ⁴ Bullheads Common Carp	ks es Collected: h
Submerge Emergent Floating Algae Aquatic Ve POLY SALI RANU ELOD	erature (C) / Organics quatic vegetation ¹ ent Total	23 100 32 17 49 5 10 20 5		Speckled Dace Redside Shiners Northern Pikeminnow Largescale Suckers Sandrollers Threespine Stickleback Salmonids ³ Lamprey Non-native Fish Speci Western Mosquitofis Centrarchids ⁴ Bullheads	«s es Collected:

Site Name	LONG TOM RANCH				TR1E*
Basin	MID-WILLAMETTE RIVER			1 0	29/2004
Subbasin	LONG TOM RIVER			UTM 10T 479151	4897535
Surface Area	a (m2)	4289		Native Fish Species Colle	cted:
Average Dep	oth (m)	1		Oregon Chub	
Water Temp	erature (C)	18		Cottids	
Percent Silt /		100		Speckled Dace	
		100		Redside Shiners	
Types of ac	quatic vegetation ¹			Northern Pikeminnows	
Submerge	ent	20		Largescale Suckers Sandrollers	
Emergent		4		Threespine Sticklebacks	
Floating				Salmonids ³	
Algae				Lamprey	
	Total	24			
Aquatic Ve	getation (genera)			Non-native Fish Species	Collected:
ELOD		5		Western Mosquitofish	
SALI		2		Centrarchids ⁴ BG	50
RANU		5		Bullheads	
ELOD		2		Common Carp	
POTA		10		Other:	
			NOTE:	POTENTIAL INTRODUCTION S	ITE
Site Name	MARYS RIVER			Map Code N	ARY00866*
Basin	MID-WILLAMETTE RIVER			Sampling Date 10	0/7/2004
Subbasin	MARYS RIVER			UTM 10T 458788	4938060
Surface Area	a (m2)	880		Native Fish Species Colle	cted:
Average Dep	oth (m)	0.8		Oregon Chub	
Water Temp	erature (C)	14		Cottids	3
Percent Silt /		10		Speckled Dace	5
	-	10		Redside Shiners	19
Types of ac	quatic vegetation ¹			Northern Pikeminnows	
Submerge	ent	0		Largescale Suckers	
Emergent		0		Sandrollers	
Lineigen		0		Threespine Sticklebacks	4
Floating		0		Salmonids ³ CT Lamprey	1
-		<u>0</u>		Lamprey	
Floating	Total	0			
Floating Algae	Total getation (genera)			Non-native Fish Species	Collected:
Floating Algae Aquatic Ve				Western Mosquitofish	Collected:
Floating Algae					Collected:
Floating Algae Aquatic Ve				Western Mosquitofish	Collected:
Floating Algae Aquatic Ve				Western Mosquitofish Centrarchids ⁴	Collected:
Floating Algae Aquatic Ve				Western Mosquitofish Centrarchids ⁴ Bullheads	Collected:

Site Name Basin	MARYS RIVER MID-WILLAMETTE RIVER				ARY01075 *)/7/2004
Subbasin	MARYS RIVER			UTM 10T 468412	4932510
Surface Are	ea (m2)	2091		Native Fish Species Colle	cted:
Average De	pth (m)	0.3		Oregon Chub	
Water Temp	erature (C)	16		Cottids	9
Percent Silt	/ Organics	5		Speckled Dace Redside Shiners	5 31
Submerge Emergent Floating Algae		0 3 0 <u>0</u> 3		Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species (2 Colloctod:
GRAM	getation (genera)	3		Western Mosquitofish Centrarchids ⁴ Bullheads Common Carp	Joneoleu.
				Other:	
			NOTE:	ODOT- SALMONID HABITAT	

Site Name	BOULDER CREEK			Map Code BLDR05978*	
Basin Subbasin	SANTIAM RIVER NORTH SANTIAM			Sampling Date 10/5/2004 UTM 10T 572204 49503	01
Surface Are		650		Native Fish Species Collected:	
Average Dep	pth (m)	0.25		Oregon Chub	
Water Temp	erature (C)	9		Cottids	
Percent Silt	/ Organics	0		Speckled Dace Redside Shiners	
Types of a	quatic vegetation ¹			Northern Pikeminnows	
Submerge	ent	0		Largescale Suckers	
Emergent		0		Sandrollers	
Floating		0		Threespine Sticklebacks	,
Algae		<u>0</u>		Salmonids ³ CT	1
-	Total	0		Lamprey	
Aquatic Ve	getation (genera)			Non-native Fish Species Collected:	
NONE				Western Mosquitofish Centrarchids ⁴ Bullheads Common Carp	
				Other:	
			NOTE:	ODOT BRIDGE- SALMONID HABITAT 7%	GRAD.
Site Name Basin Subbasin	FOSTER PULLOUT PON SANTIAM RIVER MIDDLE SANTIAM	١D		Map Code FOS2J Sampling Date 5/4/2004 UTM 10T 529165 49183	50
Surface Are	a (m2)	2405		Native Fish Species Collected:	
Average Dep	oth (m)	1.2		Oregon Chub	565
		17		Cottids	
Water Lemp					
				Speckled Dace	
Percent Silt	/ Organics	100		Redside Shiners	
Percent Silt				Redside Shiners Northern Pikeminnows	
Percent Silt	/ Organics quatic vegetation ¹			Redside Shiners Northern Pikeminnows Largescale Suckers	
Percent Silt	/ Organics quatic vegetation ¹ ent			Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers	
Submerge	/ Organics quatic vegetation ¹ ent	100		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	
Percent Silt , Types of ac Submerge Emergent	/ Organics quatic vegetation ¹ ent	100 80		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³	
Percent Silt / Types of ac Submerge Emergent Floating	/ Organics quatic vegetation ¹ ent	100 80		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	
Percent Silt / Types of ac Submerge Emergent Floating Algae	/ Organics quatic vegetation ¹ ent	100 80 20		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³	
Percent Silt / Types of ac Submerge Emergent Floating Algae	/ Organics quatic vegetation ¹ ent Total	100 80 20		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish	
Percent Silt / Types of ac Submerge Emergent Floating Algae	/ Organics quatic vegetation ¹ ent Total	100 80 20 100		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish Centrarchids ⁴	
Percent Silt / Types of ac Submerge Emergent Floating Algae Aquatic Ve POTA	/ Organics quatic vegetation ¹ ent Total	100 80 20 100 80		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish	
Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve POTA SPAR	/ Organics quatic vegetation ¹ ent Total	100 80 20 100 80 10		Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish Centrarchids ⁴ Bullheads	

Site Name	GEREN ISLAND NORT	H CHANNEL	Map Code GER4I
Basin Subbasin	SANTIAM RIVER NORTH SANTIAM		Sampling Date 4/26/2004 UTM 10T 519371 4959900
Surface Are	na (m2)	4469	Native Fich Spacies Collected:
Surface Are			Native Fish Species Collected:
Average De	pth (m)	1	Oregon Chub 2291
Water Temp	erature (C)	12	Cottids 17
Percent Silt	/ Organics	90	Speckled Dace 2 Redside Shiners 17
Types of a	quatic vegetation ¹		Northern Pikeminnows
Submerge	ent	20	Largescale Suckers 59
Emergent		45	Sandrollers Throosping Sticklobacke
Floating			Threespine Sticklebacks Salmonids ³
Algae			Lamprey
	Total	65	Lampioy
Aquatic Ve	egetation (genera)		Non-native Fish Species Collected:
GRAM		30	Western Mosquitofish
ELOD		20	Centrarchids ⁴
CARE		5	Bullheads
JUNC		5	Common Carp
IRIS		2	Other:
0.4.1.1		3	
SALI			
SALI			NOTE: POPULATION ESTIMATE
Site Name	GEREN ISLAND NORT	TH POND	Map Code GER6I
Site Name	GEREN ISLAND NORT SANTIAM RIVER NORTH SANTIAM	TH POND	
Site Name Basin	SANTIAM RIVER	TH POND	Map CodeGER6ISampling Date4/26/2004
Site Name Basin Subbasin Surface Are	SANTIAM RIVER NORTH SANTIAM ea (m2)	TH POND 20625	Map CodeGER6ISampling Date4/26/2004UTM10T5193714959954Native Fish Species Collected:
Site Name Basin Subbasin Surface Are	SANTIAM RIVER NORTH SANTIAM ea (m2)		Map CodeGER6ISampling Date4/26/2004UTM10T5193714959954Native Fish Species Collected:Oregon Chub
Site Name Basin Subbasin Surface Are Average Dej	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m)	20625	Map CodeGER6ISampling Date4/26/2004UTM10T5193714959954Native Fish Species Collected:Oregon ChubCottids
Site Name Basin Subbasin Surface Are Average Dej Water Temp	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C)	20625 1	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) eerature (C) / Organics	20625 1 19	Map CodeGER6ISampling Date4/26/2004UTM10T5193714959954Native Fish Species Collected:Oregon ChubCottids
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ac	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	20625 1 19 95	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows 3
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt J Types of ad Submerge	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt A Types of ac Submerge Emergent Floating	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers Sandrollers
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ac Submerge Emergent	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50 10	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers 3 Sandrollers Threespine Sticklebacks 5
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ad Submerge Emergent Floating Algae	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers 3 Sandrollers Threespine Sticklebacks Salmonids ³
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of ad Submerge Emergent Floating Algae Aquatic Ve	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50 10 60	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers 3 Samdrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected:
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ad Submerge Emergent Floating Algae Aquatic Ve GRAM	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50 10 60 5	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers 3 Largescale Suckers Salmonids ³ Lamprey
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM ELOD	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50 10 60 5 25	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers 3 Samoliers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish Mosquitofish
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt A Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM ELOD MYRI	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50 10 60 5 25 25 25	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers 3 Northern Pikeminnows Largescale Suckers 3 Sandrollers Threespine Sticklebacks 3 Lamprey Non-native Fish Species Collected: Western Mosquitofish Centrarchids ⁴ BG 118
Site Name Basin Subbasin Surface Are Average Dep Water Temp Percent Silt , Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM ELOD	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	20625 1 19 95 50 10 60 5 25	Map Code GER6I Sampling Date 4/26/2004 UTM 10T 519371 4959954 Native Fish Species Collected: Oregon Chub Cottids Speckled Dace Redside Shiners 3 Northern Pikeminnows Largescale Suckers 3 Largescale Suckers Sandrollers 3 Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Collected: Western Mosquitofish Centrarchids ⁴ BG 118 Bullheads 118

Site Name Basin	WARREN GRAY SLOU SANTIAM RIVER	JGH		Map Co Samplir			GRAY1I [*] 10/5/200	
Subbasin	NORTH SANTIAM			UTM	10T	513224		957493
Surface Are	ea (m2)	8445		Native	Fish S	pecies Co	llected:	
Average De	pth (m)	1.2		Oreg	ion Chul	D		337
Water Temp		17		Cotti	ds			15
				Spec	ckled Da	се		
Percent Silt	/ Organics	100		Reds	side Shir	ners		13
Types of a	quatic vegetation ¹					keminnows	3	4
Submerg	ent	33		0	escale S	Suckers		
Emergent		22			drollers			
Floating					espine S ionids ³	Stickleback	S	714
Algae				Saim Lamj				
	Total	55		Lang	prey			
Aquatic Ve	egetation (genera)			Non-na	ative Fi	sh Specie	es Collec	ted:
GRAM		10				osquitofisl	n	
MYRI		20			trarchid	s ⁴ BG		16
CALI		3			heads			
SPAR		2		Con	nmon Ca	ırp		
JUNC		10		Other:				
POLY		10						
			NOTE:	POPULA	TION E	STIMATE		
	SANTIAM I-5 BACKW	ATER I5BW1		Map Co Samplir			15BW1G	
Basin	SANTIAM I-5 BACKW SANTIAM RIVER	ATER I5BW1		Map Co Samplir UTM		495928	4/27/200	
Basin Subbasin	SANTIAM RIVER	930		Samplir UTM	ng Date 10T	495928 pecies Co	4/27/200 4	4
Basin Subbasin Surface Are	SANTIAM RIVER ea (m2)			Samplir UTM Native	ng Date 10T	pecies Co	4/27/200 4	4
Basin Subbasin Surface Are Average De	SANTIAM RIVER ea (m2) pth (m)	930 1.5		Samplir UTM Native	ng Date 10T Fish S jon Chul	pecies Co	4/27/200 4	4
Basin Subbasin Surface Are Average De Water Temp	SANTIAM RIVER ea (m2) pth (m) perature (C)	930 1.5 17		Samplir UTM Native Oreg Cotti	ng Date 10T Fish S jon Chul	pecies Co	4/27/200 4	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics	930 1.5		Samplir UTM Native Oreg Cotti Spec	ng Date 10T Fish S gon Chul ds	pecies Co o ce	4/27/200 4	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt	SANTIAM RIVER ea (m2) pth (m) perature (C)	930 1.5 17		Samplin UTM Native Oreg Cotti Spec Reds Nort	ng Date 10T Fish S gon Chuł ds ckled Da side Shin hern Pil	pecies Co o ce ners keminnows	4/27/200 4	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	SANTIAM RIVER ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	930 1.5 17 100		Samplin UTM Native Oreg Cotti Spec Reds North Larg	ng Date 10T Fish S gon Chul ds ckled Da side Shin hern Pil escale S	pecies Co o ce ners keminnows	4/27/200 4	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17		Samplin UTM Native Oreg Cottii Spec Reds North Larg Sand	ng Date 10T Fish S gon Chul ds ckled Da side Shir hern Pil escale S drollers	pecies Co o ce ners keminnows Suckers	4/27/200 4 ollected:	4 953377
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70		Samplin UTM Native Oreg Cotti Spec Reds North Larg Sand Thre	ng Date 10T Fish S Jon Chul ds ckled Da side Shin hern Pil escale S drollers espine S	pecies Co o ce ners keminnows	4/27/200 4 ollected:	4
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0		Samplin UTM Native Oreg Cotti Spec Reds Norti Larg Sand Thre Salm	ng Date 10T Fish S gon Chul ds ckled Da side Shin hern Pil escale S drollers espine S oonids ³	pecies Co o ce ners keminnows Suckers	4/27/200 4 ollected:	4 953377
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10		Samplin UTM Native Oreg Cotti Spec Reds North Larg Sand Thre	ng Date 10T Fish S gon Chul ds ckled Da side Shin hern Pil escale S drollers espine S oonids ³	pecies Co o ce ners keminnows Suckers	4/27/200 4 ollected:	4 953377
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	SANTIAM RIVER ea (m2) pth (m) erature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0 <u>0</u>		Samplin UTM Native Oreg Cotti Spec Reds North Larg Sand Thre Salm Lam	rg Date 10T Fish S gon Chul ds ckled Da side Shin hern Pil escale S drollers espine S nonids ³ prey	pecies Co o ce ners keminnows Suckers	4/27/200 4 ollected:	4 953377 15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0 <u>0</u> 80		Samplin UTM Native Oreg Cotti Spec Reds Norti Larg Sand Thre Salm Lam	rg Date 10T Fish S gon Chul ds ckled Da side Shin hern Pil escale S drollers espine S ionids ³ prey ative Fi	pecies Co ce ners keminnows Suckers Stickleback	4/27/200 4 ollected:	4 953377 15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0 <u>0</u> 80 30		Samplin UTM Native Oreg Cotti Spec Reds Norti Larg Sand Thre Salm Lamp Non-na	rg Date 10T Fish S gon Chul ds ckled Da side Shin hern Pil escale S drollers espine S ionids ³ prey ative Fi	pecies Co o ce ners keminnows Suckers Stickleback sh Specie osquitofish	4/27/200 4 ollected:	4 953377 15
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR ELOD	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0 <u>0</u> 80 30 20		Samplin UTM Native Oreg Cotti Spec Reds North Larg Sanc Thre Salm Lamp Non-na Wes Cen	ng Date 10T Fish S gon Chul ds ckled Da side Shin hern Pil escale S drollers espine S conids ³ prey ative Fi stern M	pecies Co o ce ners keminnows Suckers Stickleback sh Specie osquitofish	4/27/200 4 ollected:	4 953377 15 ted:
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0 <u>0</u> 80 30 20 10		Samplin UTM Native Oreg Cotti Spec Reds North Larg Sand Thre Salm Lam Non-na Wes Cen Bull	rg Date 10T Fish S Jon Chul ds ckled Da side Shin hern Pil escale S drollers espine S ionids ³ prey ative Fi stern M ttrarchid	pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofist s ⁴ BG	4/27/200 4 ollected:	4 953377 15 ted:
Submerg Emergent Floating Algae Aquatic Ve SPAR ELOD POTA	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0 <u>0</u> 80 30 20		Samplin UTM Native Oreg Cotti Spec Reds Norti Larg Sand Thre Salm Lamp Non-na Wes Cen Bull Con	rg Date 10T Fish S oon Chul ds ckled Da side Shin hern Pil escale S drollers espine S oonids ³ prey ative Fi stern M trarchid heads nmon Ca	pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofist s ⁴ BG	4/27/200 4 ollected:	4 953377 15 ted:
Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg Emergent Floating Algae Aquatic Ve SPAR ELOD POTA POLY	SANTIAM RIVER ea (m2) pth (m) eerature (C) / Organics quatic vegetation ¹ ent	930 1.5 17 100 70 10 0 <u>0</u> 80 30 20 10 10		Samplin UTM Native Oreg Cotti Spec Reds North Larg Sand Thre Salm Lam Non-na Wes Cen Bull	rg Date 10T Fish S oon Chul ds ckled Da side Shin hern Pil escale S drollers espine S oonids ³ prey ative Fi stern M trarchid heads nmon Ca	pecies Co o ce hers keminnows Suckers Stickleback sh Specie osquitofist s ⁴ BG	4/27/200 4 ollected:	4 953377 15 ted:

Site Name SANTIAM I-5 SIDE CH	INL PD I5BW2		Map Code		I5BW2E	
Basin SANTIAM RIVER Subbasin			Sampling Date UTM 10T	496051	4/27/2004 495	3491
Surface Area (m2)	6000		Native Fish S	pecies Co	llected:	
Average Depth (m)	1.2		Oregon Chul	- D		324
Water Temperature (C)	18		Cottids			19
			Speckled Da	ice		
Percent Silt / Organics	80		Redside Shi	ners		
Types of aquatic vegetation ¹			Northern Pil	keminnows		16
Submergent	40		Largescale S	Suckers		20
Emergent	25		Sandrollers			1
Floating	20		Threespine S	Sticklebacks	5	394
Algae			Salmonids ³			
Total	65		Lamprey			
Aquatic Vegetation (genera)			Non-native Fi	sh Specie	s Collected	l:
POLY	40		Western M	osquitofish		
SALI	40 5		Centrarchid			7
SPAR	5		Bullheads			
ELEO	10		Common Ca	arp		
GRAM	5		Other:		CM	
		NOTE:	POPULATION E	STIMATE		
Site Name SANTIAM I-5 EAST S	LOUGH #1	NOTE:	POPULATION E	STIMATE	I5ES1	
Site Name SANTIAM I-5 EAST S Basin SANTIAM RIVER	LOUGH #1	NOTE:		STIMATE	I5ES1 4/28/2004	
Basin SANTIAM RIVER	LOUGH #1	NOTE:	Map Code	STIMATE 496366	4/28/2004	3249
Basin SANTIAM RIVER Subbasin	LOUGH #1 847	NOTE:	Map Code Sampling Date	496366	4/28/2004 4953	3249
Basin SANTIAM RIVER Subbasin Surface Area (m2)		NOTE:	Map Code Sampling Date UTM 10T	496366 pecies Co	4/28/2004 4953	3249
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m)	847 0.5	NOTE:	Map Code Sampling Date UTM 10T Native Fish S	496366 pecies Co	4/28/2004 4953	3249
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C)	847 0.5 18	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul	496366 pecies Co	4/28/2004 4953	
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Surface Area (m2)	847 0.5	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids	496366 pecies Co	4/28/2004 4953	6
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m)	847 0.5 18	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil	496366 pecies Co o ice hers keminnows	4/28/2004 4953	6 5 96 65
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹	847 0.5 18 100	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S	496366 pecies Co o ice hers keminnows	4/28/2004 4953	6 5 96
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent	847 0.5 18 100 65	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers	496366 pecies Co p nece ners keminnows Suckers	4/28/2004 495: Ilected:	6 5 96 65 47
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent	847 0.5 18 100	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S	496366 pecies Co p nece ners keminnows Suckers	4/28/2004 495: Ilected:	6 5 96 65
Basin SANTIAM RIVER Subbasin Subbasin Santiam River Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating	847 0.5 18 100 65	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S Sandrollers Threespine S Salmonids ³	496366 pecies Co p nece ners keminnows Suckers	4/28/2004 495: Ilected:	6 5 96 65 47
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent	847 0.5 18 100 65	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S	496366 pecies Co p nece ners keminnows Suckers	4/28/2004 495: Ilected:	6 5 96 65 47
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae	847 0.5 18 100 65 13	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S Sandrollers Threespine S Salmonids ³	496366 pecies Co o nece ners keminnows Suckers Sticklebacks	4/28/2004 495: Ilected:	6 5 96 65 47 8
Basin SANTIAM RIVER Subbasin Surface Area (m2) Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) Submergent	847 0.5 18 100 65 13 78	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pii Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	496366 pecies Co po ners keminnows Suckers Sticklebacks sh Specie	4/28/2004 4953 Ilected:	6 5 96 65 47 8
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ²) MYRI	847 0.5 18 100 65 13 78 10	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Piil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey	496366 pecies Co po ners keminnows Suckers Sticklebacks sh Specie osquitofish	4/28/2004 4953 Ilected:	6 5 96 65 47 8
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) MYRI POLY	847 0.5 18 100 65 13 78 10 50	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Piil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M	496366 pecies Co po ners keminnows Suckers Sticklebacks sh Specie osquitofish	4/28/2004 4953 Ilected:	6 5 96 65 47 8
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) MYRI POLY GRAM	847 0.5 18 100 65 13 78 78 10 50 10	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid	496366 pecies Co o nce hers keminnows Suckers Sticklebacks sh Specie osquitofish s ⁴	4/28/2004 4953 Ilected:	6 5 96 65 47 8
Basin SANTIAM RIVER Subbasin Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) MYRI POLY GRAM IRIS	847 0.5 18 100 65 13 78 10 50 10 10 1	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid Bullheads Common Ca	496366 pecies Co o nce hers keminnows Suckers Sticklebacks sh Specie osquitofish s ⁴	4/28/2004 495: Ilected:	6 5 96 65 47 8
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) MYRI POLY GRAM	847 0.5 18 100 65 13 78 78 10 50 10	NOTE:	Map Code Sampling Date UTM 10T Native Fish S Oregon Chul Cottids Speckled Da Redside Shin Northern Pil Largescale S Sandrollers Threespine S Salmonids ³ Lamprey Non-native Fi Western M Centrarchid Bullheads	496366 pecies Co o nce hers keminnows Suckers Sticklebacks sh Specie osquitofish s ⁴	4/28/2004 4953 Ilected:	6 5 96 65 47 8

Site Name SANTIAM I-5 EAST SI	LOUGH #2		Map Code	I5ES2
Basin SANTIAM RIVER			Sampling Date	4/28/2004
Subbasin			UTM 10T 49643	4953261
Surface Area (m2)	270		Native Fish Species	Collected:
Average Depth (m)	0.8		Oregon Chub	
Water Temperature (C)	17		Cottids	3
Percent Silt / Organics	100		Speckled Dace	1
-			Redside Shiners	32
Types of aquatic vegetation ¹			Northern Pikeminno	
Submergent	70		Largescale Suckers Sandrollers	4
Emergent	22		Threespine Stickleba	
Floating			Salmonids ³	
Algae			Lamprey	
Total	92			
Aquatic Vegetation (genera)			Non-native Fish Spe	cies Collected:
POLY	70		Western Mosquitor	ïsh
GRAM	5		Centrarchids ⁴	
ELEO	10		Bullheads	
CARE	2		Common Carp	
SALI	5		Other:	CM
		NOTE:	PONDED SLOUGH UPS	TREAM OF I5BW1
Site Name SANTIAM I-5 GRAVE	L PIT	NOTE:	PONDED SLOUGH UPS	IREAM OF I5BW1
	L PIT	NOTE:		
Basin SANTIAM RIVER	L PIT	NOTE:	Map Code	I5GP1 4/28/2004
Basin SANTIAM RIVER Subbasin	L PIT 14852	NOTE:	Map Code Sampling Date	I5GP1 4/28/2004 99 4953370
Basin SANTIAM RIVER Subbasin Surface Area (m2)		NOTE:	Map Code Sampling Date UTM 10T 49639	I5GP1 4/28/2004 99 4953370
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m)	14852	NOTE:	Map Code Sampling Date UTM 10T 49639 Native Fish Species	I5GP1 4/28/2004 99 4953370 Collected:
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C)	14852 2.5 19	NOTE:	Map Code Sampling Date UTM 10T 49639 Native Fish Species Oregon Chub Cottids Speckled Dace	I5GP1 4/28/2004 99 4953370 Collected: 1
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics	14852 2.5	NOTE:	Map Code Sampling Date UTM 10T 49639 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics	14852 2.5 19	NOTE:	Map Code Sampling Date UTM 10T 49639 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Surface Area (m2)	14852 2.5 19	NOTE:	Map Code Sampling Date UTM 10T 49639 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3 wws 112
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹	14852 2.5 19 20	NOTE:	Map Code Sampling Date UTM 10T 4963S Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3 ows 112 1
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent	14852 2.5 19 20 65	NOTE:	Map Code Sampling Date UTM 10T 4963S Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3 ows 112 1
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Emergent Floating Algae	14852 2.5 19 20 65 5	NOTE:	Map Code Sampling Date UTM 10T 49638 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3 ows 112 1
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating	14852 2.5 19 20 65	NOTE:	Map Code Sampling Date UTM 10T 4963S Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3 ows 112 1
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae	14852 2.5 19 20 65 5	NOTE:	Map Code Sampling Date UTM 10T 49638 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³	I5GP1 4/28/2004 99 4953370 Collected: 1 4 3 ows 112 1 acks 11
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae	14852 2.5 19 20 65 5	NOTE	Map Code Sampling Date UTM 10T 49639 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe	I5GP1 4/28/2004 9 4953370 Collected: 1 4 3 ows 112 acks 11 cies Collected: 1 ish 100
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total	14852 2.5 19 20 65 5 70	NOTE:	Map Code Sampling Date UTM 10T 49633 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe Western Mosquitod Centrarchids ⁴ PK L	I5GP1 4/28/2004 9 4953370 Collected: 1 4 3 ows 112 acks 11 cies Collected: 1 ish 100
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ³) MYRI	14852 2.5 19 20 65 5 70 60	NOTE:	Map Code Sampling Date UTM 10T 49638 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe Western Mosquitor Centrarchids ⁴ PK L Bullheads	I5GP1 4/28/2004 9 4953370 Collected: 1 4 3 ows 112 acks 11 cies Collected: 1 ish 100
Basin SANTIAM RIVER Subbasin Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera) MYRI GRAM	14852 2.5 19 20 65 5 70 60 5	NOTE:	Map Code Sampling Date UTM 10T 49633 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe Western Mosquitod Centrarchids ⁴ PK L	I5GP1 4/28/2004 9 4953370 Collected: 1 4 3 ows 112 acks 11 cies Collected: 1 ish 100
Basin SANTIAM RIVER Subbasin SANTIAM RIVER Surface Area (m2) Average Depth (m) Water Temperature (C) Percent Silt / Organics Types of aquatic vegetation ¹ Submergent Emergent Floating Algae Total Aquatic Vegetation (genera ²) MYRI GRAM LUDW	14852 2.5 19 20 65 5 70 60 5 2	NOTE:	Map Code Sampling Date UTM 10T 49638 Native Fish Species Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminno Largescale Suckers Sandrollers Threespine Stickleba Salmonids ³ Lamprey Non-native Fish Spe Western Mosquitor Centrarchids ⁴ PK L Bullheads	I5GP1 4/28/2004 9 4953370 Collected: 1 4 3 ows 112 acks 11 cies Collected: 1 ish 100

Site Name Basin	LITTLE NORTH FORK SANTIAM RIVR SANTIAM RIVER						LNF07347* 10/5/2004
Subbasin	NORTH SANTIAM				10T	531625	4959549
Surface Area (m2) 9996			Native Fish Species Collected:				
Average Depth (m)		0.8		Orego	on Chub)	
Water Temperature (C)		13		Cottids			
Percent Silt / Organics		5		Speckled Dace			
-		5		Redside Shiners			132
Types of aquatic vegetation ¹						eminnow	s 81
Submerge	ent	0			escale S rollers	Suckers	
Emergent		0				Stickleback	7e
Floating		0			onids ³		19
Algae		<u>0</u>		Lamp		0111	10
	Total	0			,		
Aquatic Ve	getation (genera)			Non-na	tive Fi	sh Specie	es Collected:
NONE				Cent Bullh	tern Mo trarchids leads mon Ca		n
				Other:			
			NOTE:	ODOT BF	RIDGE-	SALMONI	D HABITAT
Site Name	MINTO CREEK			Map Coo			MINT06806*
Basin	SANTIAM RIVER			Sampling	-	504445	10/5/2004
Subbasin	NORTH SANTIAM			UTM [·]	10T	584115	4942359
Surface Are	a (m2)	500		Native I	Fish Sj	oecies Co	ollected:
Average De	pth (m)	0.15		Orego	on Chub)	
Water Temp	erature (C)	7.5		Cottid	S		
Percent Silt		0			kled Da		
	-	č			ide Shir		
Types of a	quatic vegetation ¹					eminnow	S
Submerge	ent	15			escale S rollers	Suckers	
Emergent		0				Stickleback	rs.
Floating		0			onids ³		2
Algae		<u>0</u>		Lamp		01	£
	Total	15					
Aquatic Ve	getation (genera)			Non-na	tive Fi	sh Specie	es Collected:
FONT		15		Cent Bullh	tern Mo trarchids leads mon Ca		n
				Other:			
			NOTE:	ODOT BF		SITE- SALM	MONID HABITAT

SANTIAM RIVER BASIN

	GREEN'S BRIDGE BACKWATER		Map Code NS14J			
Basin	SANTIAM RIVER		1 0	4/26/2004		
Subbasin	NORTH SANTIAM		UTM 10T 502354	4950367		
Surface Are	a (m2)	2100	Native Fish Species Col	lected:		
Average Depth (m)		2.5	Oregon Chub			
Water Temperature (C)		13	Cottids	12		
Percent Silt / Organics 90		90	Speckled Dace	2		
Types of aquatic vegetation ¹		Redside Shiners Northern Pikeminnows	19			
Types of aquatic vegetation		Largescale Suckers	19			
Submerge	ent	60	Sandrollers			
Emergent		10	Threespine Sticklebacks	27		
Floating			Salmonids ³	21		
Algae			Lamprey			
	Total	70	Lamproy			
Aquatic Ve	getation (genera)		Non-native Fish Species	s Collected:		
GRAM		10	Western Mosquitofish			
ELOD		20	Centrarchids ⁴ BG LB	30		
MYRI		30	Bullheads			
JUNC		5	Common Carp			
ELEO		2	Other:			
VALI		10	Other:			
Site Name	PIONEER PARK BACK		NOTE: Map Code	PION3H*		
Basin				9/28/2004		
Subbasin	NORTH SANTIAM		UTM 10T 516950	4960250		
Surface Are	a (m2)	2520	Native Fish Species Col	lected:		
Average De	oth (m)	0.5				
Average De		0.5	Oregon Chub			
			Oregon Chub Cottids	3		
Water Temp	erature (C)	14		3 7		
Water Temp	erature (C)		Cottids			
Water Temp Percent Silt	erature (C)	14	Cottids Speckled Dace	7		
Water Temp Percent Silt , Types of a	erature (C) / Organics quatic vegetation ¹	14 20	Cottids Speckled Dace Redside Shiners	7		
Water Temp Percent Silt Types of ac Submerge	erature (C) / Organics quatic vegetation¹ ent	14 20 1	Cottids Speckled Dace Redside Shiners Northern Pikeminnows	7		
Water Temp Percent Silt Types of ac Submerge Emergent	erature (C) / Organics quatic vegetation¹ ent	14 20 1 7	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	7 22		
Water Temp Percent Silt Types of a Submerge Emergent Floating	erature (C) / Organics quatic vegetation¹ ent	14 20 1 7 0	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers	7 22		
Water Temp Percent Silt Types of ac Submerge Emergent	erature (C) / Organics quatic vegetation¹ ent	14 20 1 7	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks	7 22		
Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae	erature (C) / Organics quatic vegetation ¹ ent	14 20 1 7 0 <u>0</u>	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³	7 22		
Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve	erature (C) / Organics quatic vegetation¹ ent Total	14 20 1 7 0 <u>0</u> 8	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey	7 22		
Submerge Emergent Floating Algae Aquatic Ve	erature (C) / Organics quatic vegetation¹ ent Total	14 20 1 7 0 <u>0</u> 8 5	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species	7 22		
Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM SPAR	erature (C) / Organics quatic vegetation¹ ent Total	14 20 1 7 0 <u>0</u> 8 5 2	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Western Mosquitofish	7 22		
Water Temp Percent Silt Types of ac Submerge Emergent Floating Algae Aquatic Ve GRAM	erature (C) / Organics quatic vegetation¹ ent Total	14 20 1 7 0 <u>0</u> 8 5	Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Western Mosquitofish Centrarchids ⁴	7 22		

NOTE: SWCD RECONSTRUCTED, WILL MODIFY MORE

Site Name	SANTIAM CONS. EASEMENT SCE1-4		Map CodeSCE1-4GSampling Date5/17/2004			
Basin	SANTIAM RIVER		1 0			
Subbasin	NORTH SANTIAM		UTM 10T 500303	4947762		
Surface Are	ea (m2)	16300	Native Fish Species Collecte	d:		
Average Depth (m) 1		1	Oregon Chub			
Water Temperature (C) 14		14	Cottids	3		
Percent Silt / Organics 95		95	Speckled Dace	1		
		Redside Shiners	7			
Types of aquatic vegetation ¹			Northern Pikeminnows Largescale Suckers	2		
Submerge	ent	81	Sandrollers			
Emergent		2	Threespine Sticklebacks	422		
Floating		2	Salmonids ³ CT	422		
Algae		<u>0</u>		3		
	Total	85	Lamprey			
Aquatic Ve	egetation (genera)		Non-native Fish Species Coll	ected:		
MYRI		50	Western Mosquitofish	20		
ELOD		25	Centrarchids ⁴			
POTA		2	Bullheads			
GRAM		2	Common Carp			
SPAR		4				
		2	Other:			
IEMN						
LEMN		NC)TE:			
LEMN		NC)TE:			
LEMN Site Name	SANTIAM CONS EASI		Map Code SCE7	1		
Site Name	SANTIAM CONS EASI SANTIAM RIVER					
Site Name Basin			Map Code SCE7			
Site Name Basin Subbasin	SANTIAM RIVER NORTH SANTIAM		Map Code SCE7 Sampling Date 5/17/2	2004 4948239		
Site Name Basin Subbasin Surface Are	SANTIAM RIVER NORTH SANTIAM ea (m2)	EMENT SCE7	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte	2004 4948239		
Site Name Basin Subbasin Surface Are Average De	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m)	EMENT SCE7 4000 1.2	Map CodeSCE7Sampling Date5/17/2UTM10T500581	2004 4948239 d:		
Site Name Basin Subbasin Surface Are Average De Water Temp	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C)	EMENT SCE7 4000 1.2 14	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub	2004 4948239 d: 1		
Site Name Basin Subbasin Surface Are Average De Water Temp	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C)	EMENT SCE7 4000 1.2	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Cottids	2004 4948239 d: 1		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C)	EMENT SCE7 4000 1.2 14	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace	2004 4948239 d: 1 3		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹	4000 1.2 14 100	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners	2004 4948239 d: 1 3 2		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerg	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows	2004 4948239 d: 1 3 2 2 2		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78 5	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers	2004 4948239 d: 1 3 2 2 2		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78 5 2	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Sandrollers	2004 4948239 d: 1 3 2 2 3		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) berature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78 5 2 10	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Sticklebacks	2004 4948239 d: 1 3 2 2 3		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78 5 2	Map CodeSCE7Sampling Date5/17/2UTM10T500581Native Fish Species CollecteOregon ChubOregon ChubCottidsSpeckled DaceRedside ShinersNorthern PikeminnowsLargescale SuckersSandrollersThreespine SticklebacksSalmonids ³ LampreyJamprey	2004 4948239 d: 1 3 2 2 3 42		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) berature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78 5 2 10	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Coll	2004 4948239 d: 1 3 2 2 3 42 ected:		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	4000 1.2 14 100 78 5 2 10 95 70	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Coll	2004 4948239 d: 1 3 2 2 3 42		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELOD SPAR	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	4000 1.2 14 100 78 5 2 10 95	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Coll Western Mosquitofish Centrarchids ⁴	2004 4948239 d: 1 3 2 2 3 42 ected:		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a c Submerge Emergent Floating Algae Aquatic Ve ELOD SPAR IRIS	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78 5 2 10 95 70 6 5	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Coll Western Mosquitofish Centrarchids ⁴ Bullheads	2004 4948239 d: 1 3 2 2 3 42 ected:		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELOD SPAR	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	4000 1.2 14 100 78 5 2 10 95 70 6	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Coll Western Mosquitofish Centrarchids ⁴	2004 4948239 d: 1 3 2 2 3 42 ected:		
Site Name Basin Subbasin Surface Are Average De Water Temp Percent Silt Types of a Submerge Emergent Floating Algae Aquatic Ve ELOD SPAR IRIS	SANTIAM RIVER NORTH SANTIAM ea (m2) pth (m) perature (C) / Organics quatic vegetation ¹ ent	EMENT SCE7 4000 1.2 14 100 78 5 2 10 95 70 6 5	Map Code SCE7 Sampling Date 5/17/2 UTM 10T 500581 Native Fish Species Collecte Oregon Chub Oregon Chub Cottids Speckled Dace Redside Shiners Northern Pikeminnows Largescale Suckers Sandrollers Threespine Sticklebacks Salmonids ³ Lamprey Non-native Fish Species Coll Western Mosquitofish Centrarchids ⁴ Bullheads	2004 4948239 d: 1 3 2 2 3 42 ected:		

SANTIAM RIVER BASIN

Site Name Basin	STAYTON PUBLIC WORKS POND SANTIAM RIVER NORTH SANTIAM		Map CodeSPWP1FSampling Date4/26/2004		
Subbasin			UTM 10T 516689	4959858	
Surface Area	a (m2)	1280	Native Fish Species Collec	cted:	
Average Dep	oth (m)	1.2	Oregon Chub	1	
Water Temperature (C)		12	Cottids		
Percent Silt / Organics		90	Speckled Dace Redside Shiners		
Types of aquatic vegetation ¹			Northern Pikeminnows		
Submerge Emergent		97 3	Largescale Suckers Sandrollers Threespine Sticklebacks		
Floating Algae Total		0 <u>0</u> 100	Salmonids ³ Lamprey		
Aquatic Vegetation (genera)			Non-native Fish Species Collected:		
MYRI ELOD POLY JUNC		80 10 5 3	Western Mosquitofish Centrarchids ⁴ BG LB Bullheads Common Carp	132 7	
CALI		2	Other:		

NOTE:



3406 Cherry Ave. NE Salem, Oregon 97303