

**ODFW ROGUE ADULT
FISH PRESENCE SURVEY
Grant # 200-029**

FINAL REPORT

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FOR ROGUE BASIN COORDINATING COUNCIL**

Project Completion Report - #200-029

Rogue Fish Presence Surveys on Forested Lands

REPORT PERIODS:

2001 FIELD SEASON REPORT (see attached)

2002 FIELD SEASON REPORT (see attached)

2003 FIELD SEASON REPORT (see attached)

FINANCIAL INFO:

PROFIT AND LOSS DETAIL (see attached)

2001 FIELD SEASON

OREGON DEPARTMENT OF FISH AND WILDLIFE

ROGUE WATERSHED DISTRICT REPORT

TITLE: Rogue Fish Presence Surveys on Forested Lands, OWEB Grant No. 200-029

REPORT PERIOD: 2001 Field Season

REPORT DATE: June 2001

AUTHOR: Jerry Vogt

INTRODUCTION

The Oregon Forest Practices Act (FPA), administered by the Oregon Department of Forestry (ODF), protects streams and fish habitat from impacts of timber harvest activities. The FPA provides higher levels of protection for fish-bearing streams than for non-fish-bearing streams; however, many streams in the Rogue Basin have not been surveyed and fish presence in those streams is currently unknown. Since 1995, the Rogue Watershed District of the Oregon Department of Fish and Wildlife (ODFW) has conducted fish presence surveys on streams throughout the Rogue Basin to determine the upper limits of the distribution of salmonids in those streams so that they can be classified as fish-bearing or non-fish-bearing. The purpose of this project is to continue fish presence surveys in the Rogue Basin to identify streams containing game fish populations, so that the appropriate protection measures will be applied under the FPA.

The specific objectives of this project are 1) to determine the upper limits of fish distribution in previously unsurveyed streams in the Rogue Basin and 2) to locate and describe artificial barriers to fish passage. The fish distribution data collected during these surveys will be used to update fish distribution maps, primarily for the application of stream protection measures under the Forest Practices Act. In addition, these data will be used to 1) evaluate the need for fish screening requirements for new water rights; 2) classify streams for local planning departments for enforcement of stream setback requirements; 3) update Essential Salmonid Habitat maps used by the Division of State Lands for Removal/Fill permit evaluation.

The fish barrier information will be entered into an ODFW database so that fish passage restoration projects can be prioritized. This information will also be supplied to the Rogue Basin Fish Access Team (RBFAT) for inclusion in their database. ODFW will then be able to work with landowners, public works departments, watershed

councils and irrigators on the cooperative removal of barriers to fish passage as directed in the Oregon Plan for Salmon and Watersheds.

METHODS

Three 2-person crews conducted fish presence surveys during the 2001 field season, which began March 1 and ended May 31 in accordance with the protocol established jointly by ODF and ODFW (ODF & ODFW 1995). Each crew used a backpack electrofisher to sample streams for the presence of fish. In accordance with guidelines provided by the National Marine Fisheries Service (NMFS), surveyors measured stream conductivity at each stream prior to surveying (NMFS 2000). Electrofisher voltages used at each site did not exceed the recommended voltages for a given stream conductivity as established by the NMFS guidelines. The starting point for each stream survey was selected by ease of access (e.g. a road crossing) or because it was the last known location where fish were present. If fish were present at the starting point, surveyors continued upstream, sampling the stream until fish were no longer present. If fish were not present, the surveyors sampled downstream until fish were found.

The upstream end of fish use in a stream was determined when no fish were found for a minimum distance of 50 yards and six pools above the last location where fish were found. In many cases, the minimum survey distance and number of pools sampled was exceeded to assure that the actual end of fish use was determined. When fish were found in a stream they were identified to species, and the number and approximate size of the fish observed was recorded. The number of aquatic wildlife species, such as frogs and salamanders, was also recorded.

In some cases, streamflows were too low to allow the use of electrofishing gear to sample a stream. In these cases, surveyors conducted visual observations to determine the presence/absence of fish. If a stream was completely dry, no fish survey was conducted; however other habitat features were noted.

Once the end of fish use was determined, GPS coordinates were taken to help identify the location. The end of fish use was also marked on a USGS quad map. In addition, habitat measurements were made in the stream both above and below the end of fish use. These habitat measurements included bankfull channel width, current wetted width and stream gradient. Any natural or artificial barriers that resulted in the end of fish use were identified and described. Surveyors also included comments on instream and riparian zone habitat quality.

Culverts that were encountered during these surveys were evaluated for fish passage. Several measurements were taken at each culvert, including culvert length, diameter, slope, drop to pool below, depth of jump pool, bankfull width of stream and current wetted width of the stream. Surveyors also provided comments regarding the

condition and type of culvert present and gave each culvert a subjective rating (no passage, poor passage, or fair passage) for fish passage.

In 1995, Rogue Watershed District personnel divided the Rogue Basin into 43 subbasins, so that fish presence surveys could be conducted in a systematic and efficient manner. Each year, surveyors are assigned a subbasin and each crew concentrates on surveying each stream in that subbasin before moving to a new area. If a subbasin had been started but was not completed during a previous season, surveys in those subbasins are continued the following year. Fish presence surveys are also conducted outside the selected subbasins in response to formal requests submitted to ODF by timber owners

In 2001, surveys were conducted in the following areas: South Fork Little Butte Creek drainage; Merlin area streams; Williams area streams; Gold Hill area streams; East Fork Illinois River drainage; Upper Applegate River drainage; Pleasant Creek drainage; and the Antelope Creek drainage (Figure 1). A handful of streams outside these areas were surveyed in response to formal requests.

RESULTS

During the 2001 field season, a total of 387 streams were surveyed, and nearly 39 miles of new fish-bearing (Class F) streams were identified (Table 1). Of the 387 streams surveyed, 71 (18.3%) supported populations of salmonids. Of these 71 streams, 48 contained cutthroat trout, 1 contained coho salmon, 19 had steelhead, 2 had brook trout, 12 had resident rainbow trout and 3 had unidentified salmonids present. Other fish species observed during these surveys included speckled dace and sculpins. During these surveys, survey crews evaluated 162 culverts; of these, 19 were identified as complete barriers to fish passage.

Due to drought conditions that prevailed in the Rogue Basin during the winter and spring of 2001, many streams in the basin were extremely low or dry during this year's field season. In cases where streams had low streamflows or were dry and fish were either not present or their presence ended much lower in a stream than anticipated (based on habitat quality), surveyors recommended that these streams be resurveyed during another field season when streamflows occurred at more "normal" levels. A total of 74 streams were recommended for resurveying by survey crews this year.

In some subbasins, a few miles of Class F streams were subtracted from our fish distribution maps. In these cases, unsurveyed streams that had been marked as fish-bearing based on professional judgement were found to have fish use lower in the drainage than what was indicated on the map. When a fish presence survey verified the end of fish use occurred lower than the point indicated on the map, stream miles above that point were subtracted. For the entire season, less than 8 miles of Class F streams were subtracted from the maps.

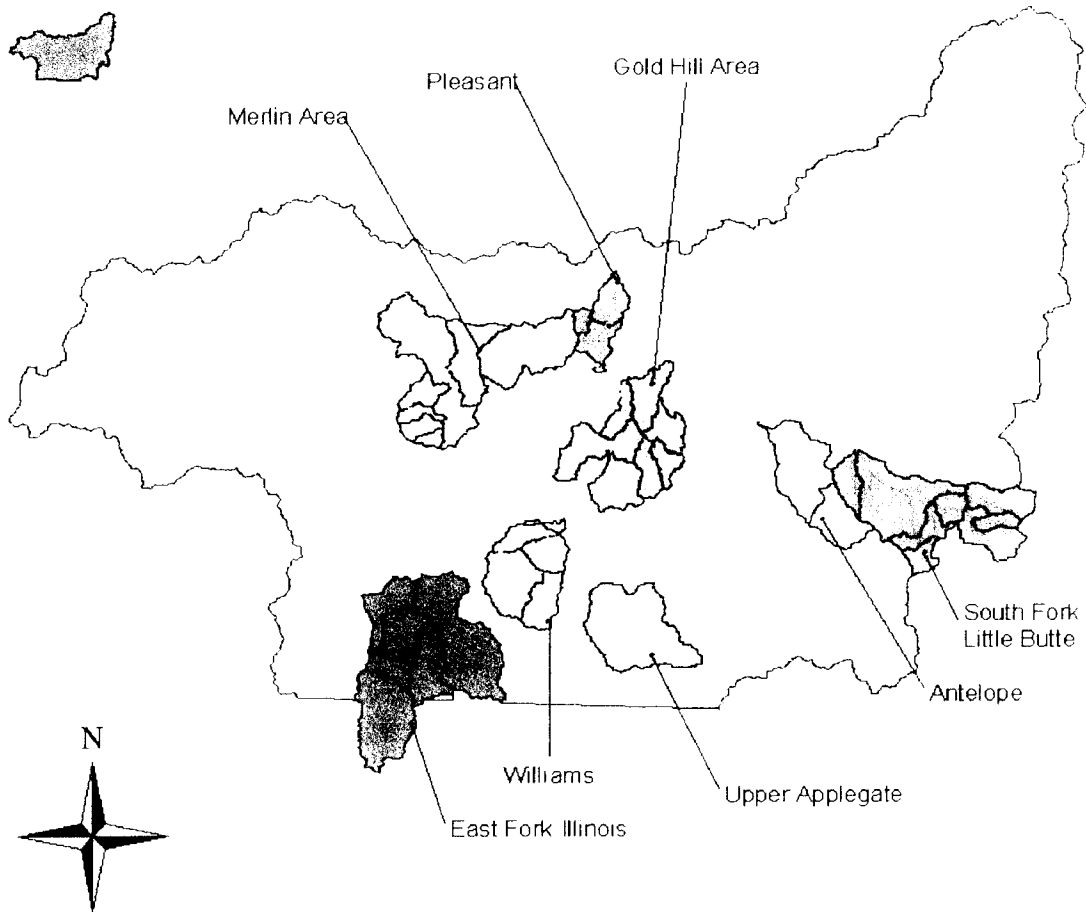


Figure 1. Locations of Rogue River subbasins surveyed during 2001 fish presence survey project.

Table 1. Summary of fish presence survey results in Rogue Basin streams, 2001.

Subbasin	# Streams Surveyed	# Miles Surveyed	# Miles Class F Added	# Miles Class F Subtracted	# Culverts Evaluated	# Impassable Culverts Identified
South Fork Little Butte	73	15.35	16.65	2.2	15	0
Merlin Area	68	15.4	6.45	4.98	16	0
Williams Area	21	3.25	0	0	17	0
Gold Hill Area	69	14.0	5.25	0.25	49	5
East Fork Illinois River	3	1.0	0	0	1	0
Upper Applegate R.	77	12.7	5.54	0.5	31	2
Pleasant Creek	51	6.4	2.7	0	16	4
Antelope Creek	18	3.9	1.2	0	13	6
Misc. Streams	7	6.3	0.95	0	4	2
Totals	387	78.3	38.74	7.93	162	19

DISCUSSION

As a result of fish presence surveys conducted in the Rogue Basin in 2001, nearly 39 miles of fish-bearing streams were identified and added to fish distribution maps. These streams will now receive protection from timber harvest activities as Class F streams in accordance with the Forest Practices Act. In addition, the Rogue Watershed District fish distribution database has been updated to reflect this new information on salmon, steelhead and trout use in the basin. This database is used by district personnel on a daily basis for evaluating the need for fish screening requirements for new water rights, classifying streams for local planning departments for enforcement of stream setback requirements and updating Essential Salmonid Habitat maps used by the Division of State Lands for Removal/Fill permit evaluation. The fish distribution, stream habitat and barrier information collected during these surveys has also been entered into a statewide database administered by ODFW's StreamNet program.

While 39 miles of Class F streams were identified during this year's surveys, that total might have been higher if streamflows during the survey period had been at normal levels. Many of the streams that were surveyed appeared to have habitat that would support fish and barriers to fish passage were not apparent. These streams were identified by survey crews and will be resurveyed in the future when drought conditions in the Rogue Basin have subsided.

Another important accomplishment of this year's surveys was the evaluation of 162 culverts for fish passage. Information for each of these culverts has been entered into the Rogue Watershed District barrier database. Barriers in this database can now be prioritized based on the severity of the barrier, species present, and miles of habitat above the barrier. ODFW will continue to work cooperatively with public agencies and private landowners that own or maintain these barriers to improve fish passage at high priority sites. At present, there are 987 barriers listed in the Rogue Watershed District database.

The Rogue Basin has been divided into 43 subbasins for the purpose of conducting fish presence surveys in an efficient manor. Including the 2001 field season, surveys in 16 of these subbasins have been completed since 1995. Another 4 subbasins have been started and are close to completion. The OWEB grant for this project will fund one more year of surveys, and we anticipate completing another 3 or 4 subbasins during the next field season. Hopefully we will be able to obtain additional funding to continue these valuable surveys beyond the 2002 field season so that the remaining subbasins will all be surveyed.

ACKNOWLEDGMENTS

I would like to thank the Oregon Watershed Enhancement Board for providing funding for this project. I would also like to thank the Rogue Basin Coordinating Council for supporting this project and serving as the applicant for the OWEB grant, and Lu Anthony for administering the OWEB grant. The Butte Falls Resource Area of the Bureau of Land Management provided half of the personnel for the survey crews and part of the equipment used for the surveys. Thanks also go to the many private landowners that graciously allowed our survey crews access to survey streams on their property.

LITERATURE CITED

ODF (Oregon Department of Forestry) and ODFW (Oregon Department of Fish and Wildlife). 1995. Surveying forest streams for fish use. Oregon Department of Forestry, Salem OR and Oregon Department of Fish and Wildlife, Portland, OR. Joint publication, 30 pp.

NMFS (National Marine Fisheries Service). 2000. NMFS backpack electrofishing guidelines. National Marine Fisheries Service, US Department of Commerce, Washington, DC. 5 pp.

2002 FIELD SEASON

OREGON DEPARTMENT OF FISH AND WILDLIFE

ROGUE WATERSHED DISTRICT REPORT

TITLE: Rogue Fish Presence Surveys on Forested Lands, OWEB Grant No. 200-029

REPORT PERIOD: 2002 Field Season

REPORT DATE: June 2002

AUTHOR: Jerry Vogt

INTRODUCTION

The Oregon Forest Practices Act (FPA), administered by the Oregon Department of Forestry (ODF), protects streams and fish habitat from impacts of timber harvest activities. The FPA provides higher levels of protection for fish-bearing streams than for non-fish-bearing streams; however, many streams in the Rogue Basin have not been surveyed and fish presence in those streams is currently unknown. Since 1995, the Rogue Watershed District of the Oregon Department of Fish and Wildlife (ODFW) has conducted fish presence surveys on streams throughout the Rogue Basin to determine the upper limits of the distribution of salmonids in those streams so that they can be classified as fish-bearing or non-fish-bearing. The purpose of this project is to continue fish presence surveys in the Rogue Basin to identify streams containing game fish populations, so that the appropriate protection measures will be applied under the FPA.

The specific objectives of this project are 1) to determine the upper limits of fish distribution in previously unsurveyed streams in the Rogue Basin and 2) to locate and describe artificial barriers to fish passage. The fish distribution data collected during these surveys will be used to update fish distribution maps, primarily for the application of stream protection measures under the Forest Practices Act. In addition, these data will be used to 1) evaluate the need for fish screening requirements for new water rights; 2) classify streams for local planning departments for enforcement of stream setback requirements; 3) update Essential Salmonid Habitat maps used by the Division of State Lands for Removal/Fill permit evaluation.

The fish barrier information will be entered into an ODFW database so that fish passage restoration projects can be prioritized. This information will also be supplied to the Rogue Basin Fish Access Team (RBFAT) for inclusion in their database. ODFW will then be able to work with landowners, public works departments, watershed

councils and irrigators on the cooperative removal of barriers to fish passage as directed in the Oregon Plan for Salmon and Watersheds.

METHODS

Two 2-person crews conducted fish presence surveys during the 2002 field season, which began March 1 and ended May 31 in accordance with the protocol established jointly by ODF and ODFW (ODF & ODFW 1995). Each crew used a backpack electrofisher to sample streams for the presence of fish. In accordance with guidelines provided by the National Marine Fisheries Service (NMFS), surveyors measured stream conductivity at each stream prior to surveying (NMFS 2000). Electrofisher voltages used at each site did not exceed the recommended voltages for a given stream conductivity as established by the NMFS guidelines. The starting point for each stream survey was selected by ease of access (e.g. a road crossing) or because it was the last known location where fish were present. If fish were present at the starting point, surveyors continued upstream, sampling the stream until fish were no longer present. If fish were not present, the surveyors sampled downstream until fish were found.

The upstream end of fish use in a stream was determined when no fish were found for a minimum distance of 50 yards and six pools above the last location where fish were found. In many cases, the minimum survey distance and number of pools sampled was exceeded to assure that the actual end of fish use was determined. When fish were found in a stream they were identified to species, and the number and approximate size of the fish observed was recorded. The number of aquatic wildlife species, such as frogs and salamanders, was also recorded.

In some cases, streamflows were too low to allow the use of electrofishing gear to sample a stream. In these cases, surveyors conducted visual observations to determine the presence/absence of fish. If a stream was completely dry, no fish survey was conducted; however other habitat features were noted.

Once the end of fish use was determined, GPS coordinates were taken to help identify the location. The end of fish use was also marked on a USGS quad map. In addition, habitat measurements were made in the stream both above and below the end of fish use. These habitat measurements included bankfull channel width, current wetted width and stream gradient. Any natural or artificial barriers that resulted in the end of fish use were identified and described. Surveyors also included comments on instream and riparian zone habitat quality.

Culverts that were encountered during these surveys were evaluated for fish passage. Several measurements were taken at each culvert, including culvert length, diameter, slope, drop to pool below, depth of jump pool, bankfull width of stream and current wetted width of the stream. Surveyors also provided comments regarding the

condition and type of culvert present and gave each culvert a subjective rating (no passage, poor passage, or fair passage) for fish passage.

In 1995, Rogue Watershed District personnel divided the Rogue Basin into 43 subbasins, so that fish presence surveys could be conducted in a systematic and efficient manner. Each year, surveyors are assigned a subbasin and each crew concentrates on surveying each stream in that subbasin before moving to a new area. If a subbasin had been started but was not completed during a previous season, surveys in those subbasins are continued the following year. Fish presence surveys are also conducted outside the selected subbasins in response to formal requests submitted to ODF by timber owners

In 2002, surveys were conducted in the following areas: Deer Creek drainage; Gold Hill area streams; East Fork Illinois River drainage; Lower Applegate River drainage; lower Big Butte Creek drainage; North Fork Big Butte Creek drainage; lower Little Butte Creek drainage; and Ruch area streams. (Figure 1). Twenty-one streams outside these areas were surveyed in response to formal requests from ODF.

RESULTS

During the 2002 field season, a total of 296 streams were surveyed, and nearly 30 miles of new fish-bearing (Class F) streams were identified (Table 1). Of the 296 streams surveyed, 77 (26.0%) supported populations of salmonids. Of these 77 streams, 52 contained cutthroat trout, 22 contained coho salmon, 24 had steelhead and 15 had unidentified salmonids present. Other fish species observed during these surveys included speckled dace, goldfish, redbreast shiners, bluegill and sculpins. During these surveys, survey crews evaluated 143 culverts; of these, 48 were identified as complete barriers to fish passage.

In many subbasins, several miles of Class F streams were subtracted from our fish distribution maps. In these cases, unsurveyed streams that had been marked as fish-bearing based on professional judgement were found to have fish use lower in the drainage than what was indicated on the map. When a fish presence survey verified the end of fish use occurred lower than the point indicated on the map, stream miles above that point were subtracted. For the entire season, 22.5 miles of Class F streams were subtracted from the maps.

Status of Fish Presence Surveys through 2002

Rogue Basin

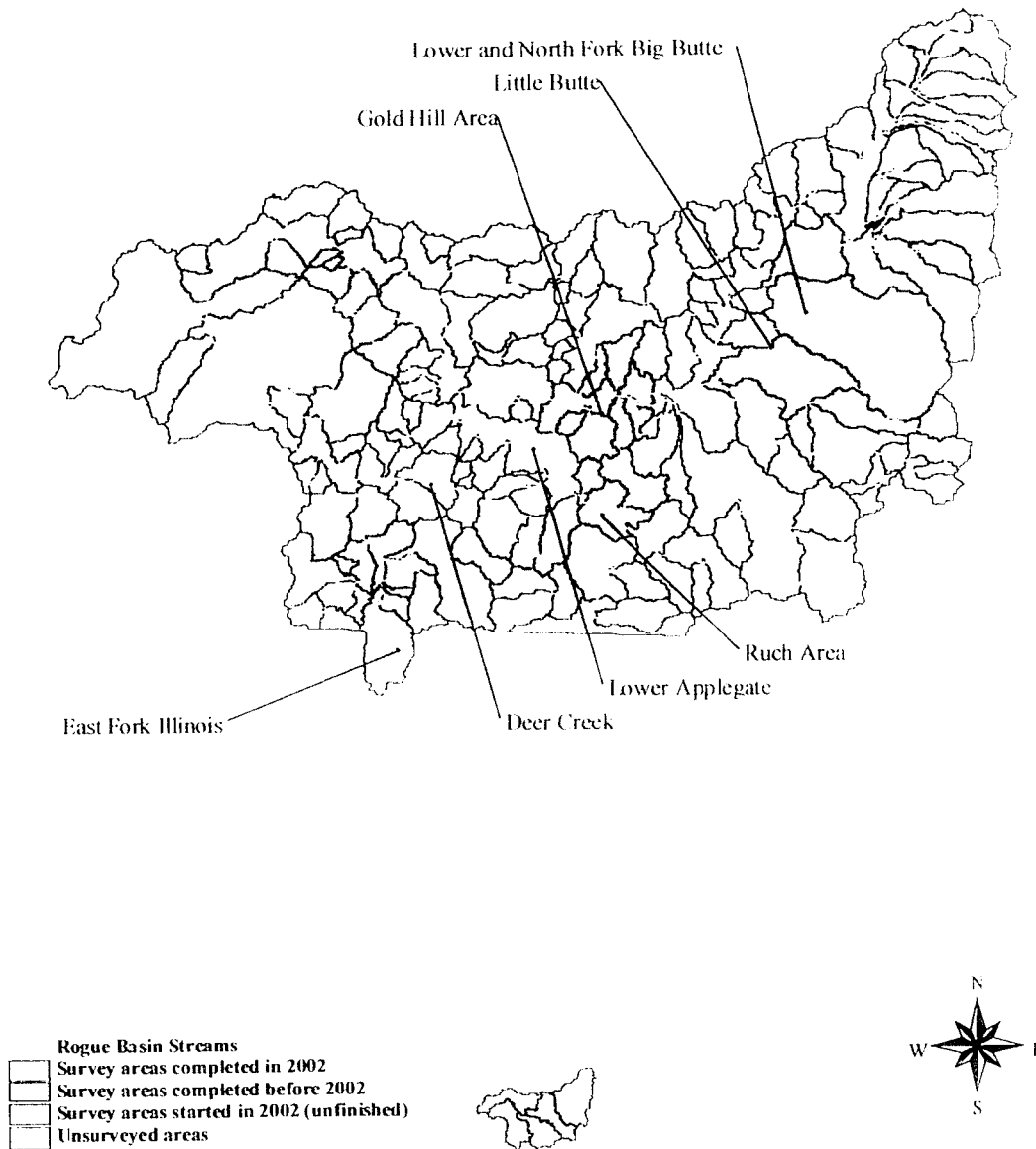


Figure 1. Locations of Rogue River subbasins surveyed during 2002 fish presence survey project.

Table 1. Summary of fish presence survey results in Rogue Basin streams, 2002.

Subbasin	# Streams Surveyed	# Miles Class F Added	# Miles Class F Subtracted	# Culverts Evaluated	# Impassable Culverts Identified
Deer Creek	86	6.6	1.0	13	5
Lower Applegate	9	0.6	3.1	1	1
Big Butte Creek	7	0.2	0	2	1
Gold Hill Area	52	2.3	1.8	46	11
East Fork Illinois River	17	6.2	7.3	2	0
Little Butte Creek	13	1.8	3.8	1	1
N. Fork Big Butte Creek	8	0.1	0.8	9	3
Ruch Area	83	4.1	3.6	62	23
Misc. Streams	21	8.0	1.1	7	3
Totals	296	29.9	22.5	143	48

DISCUSSION

As a result of fish presence surveys conducted in the Rogue Basin in 2002, nearly 30 miles of fish-bearing streams were identified and added to fish distribution maps. These streams will now receive protection from timber harvest activities as Class F streams in accordance with the Forest Practices Act. In addition, the Rogue Watershed District fish distribution database has been updated to reflect this new information on salmon, steelhead and trout use in the basin. This database is used by district personnel on a daily basis for evaluating the need for fish screening requirements for new water rights, classifying streams for local planning departments for enforcement of stream setback requirements and updating Essential Salmonid Habitat maps used by the Division of State Lands for Removal/Fill permit evaluation. The fish distribution, stream habitat and barrier information collected during these surveys has also been entered into a statewide database administered by ODFW's StreamNet program.

While 30 miles of Class F streams were identified during this year's surveys, that total might have been higher if streamflows during the survey period had been at normal levels. Many of the streams that were surveyed appeared to have habitat that

would support fish and barriers to fish passage were not apparent. These streams were identified by survey crews and will be resurveyed in the future when there is a return to better streamflow conditions.

Another important accomplishment of this year's surveys was the evaluation of 143 culverts for fish passage. Information for each of these culverts has been entered into the Rogue Watershed District barrier database. Barriers in this database can now be prioritized based on the severity of the barrier, species present, and miles of habitat above the barrier. ODFW will continue to work cooperatively with public agencies and private landowners that own or maintain these barriers to improve fish passage at high priority sites. At present, there are 1,130 barriers listed in the Rogue Watershed District database.

The Rogue Basin has been divided into 43 subbasins for the purpose of conducting fish presence surveys in an efficient manor. Including the 2002 field season, surveys in 22 of these subbasins have been completed since 1995. Another 3 subbasins have been started and are close to completion. The OWEB grant for this project will fund one more year of surveys, and we anticipate completing another 3 or 4 subbasins during the next field season. Hopefully we will be able to obtain additional funding to continue these valuable surveys beyond the 2003 field season so that the remaining subbasins will all be surveyed.

ACKNOWLEDGMENTS

I would like to thank the Oregon Watershed Enhancement Board for providing funding for this project. I would also like to thank the Rogue Basin Coordinating Council for supporting this project and serving as the applicant for the OWEB grant, and Lu Anthony for administering the OWEB grant. The Butte Falls Resource Area of the Bureau of Land Management provided half of the personnel for the survey crews and part of the equipment used for the surveys. Thanks also go to the many private landowners that graciously allowed our survey crews access to survey streams on their property.

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2003 FIELD SEASON

OREGON DEPARTMENT OF FISH AND WILDLIFE

ROGUE WATERSHED DISTRICT REPORT

TITLE: Rogue Fish Presence Surveys on Forested Lands, OWEB Grant No. 200-029

REPORT PERIOD: 2003 Field Season

REPORT DATE: June 2003

AUTHOR: Jerry Vogt

INTRODUCTION

The Oregon Forest Practices Act (FPA), administered by the Oregon Department of Forestry (ODF), protects streams and fish habitat from impacts of timber harvest activities. The FPA provides higher levels of protection for fish-bearing streams than for non-fish-bearing streams; however, many streams in the Rogue Basin have not been surveyed and fish presence in those streams is currently unknown. Since 1995, the Rogue Watershed District of the Oregon Department of Fish and Wildlife (ODFW) has conducted fish presence surveys on streams throughout the Rogue Basin to determine the upper limits of the distribution of salmonids in those streams so that they can be classified as fish-bearing or non-fish-bearing. The purpose of this project is to continue fish presence surveys in the Rogue Basin to identify streams containing game fish populations, so that the appropriate protection measures will be applied under the FPA.

The specific objectives of this project are 1) to determine the upper limits of fish distribution in previously unsurveyed streams in the Rogue Basin and 2) to locate and describe artificial barriers to fish passage. The fish distribution data collected during these surveys will be used to update fish distribution maps, primarily for the application of stream protection measures under the Forest Practices Act. In addition, these data will be used to 1) evaluate the need for fish screening requirements for new water rights; 2) classify streams for local planning departments for enforcement of stream setback requirements; 3) update Essential Salmonid Habitat maps used by the Division of State Lands for Removal/Fill permit evaluation.

Fish barrier information will be entered into an ODFW database so that fish passage restoration projects can be prioritized. Barrier information will also be supplied to the Rogue Basin Fish Access Team (RBFAT) for inclusion in their database. ODFW will then be able to work with landowners, public works departments, watershed councils and irrigators on the cooperative removal of barriers to fish passage as directed in the Oregon Plan for Salmon and Watersheds.

METHODS

A 2-person crew conducted fish presence surveys during the 2003 field season, which began March 1 and ended May 31 in accordance with the protocol established jointly by ODF and ODFW (ODF & ODFW 1995). Each crew used a backpack electrofisher to sample streams for the presence of fish. In accordance with guidelines provided by the National Marine Fisheries Service (NMFS), surveyors measured stream conductivity and water temperature at each stream prior to surveying (NMFS 2000). Electrofisher voltages used at each site did not exceed the recommended voltages for a given stream conductivity as established by the NMFS guidelines. The starting point for each stream survey was selected by ease of access (e.g. a road crossing) or because it was the last known location where fish were present. If fish were present at the starting point, surveyors continued upstream, sampling the stream until fish were no longer present. If fish were not present, the surveyors sampled downstream until fish were found.

The upstream end of fish use in a stream was determined when no fish were found for a minimum distance of 50 yards and six pools above the last location where fish were found. In many cases, the minimum survey distance and number of pools sampled was exceeded to assure that the actual end of fish use was determined. When fish were found in a stream they were identified to species, and the number and approximate size of the fish observed was recorded. The number of aquatic wildlife species, such as frogs and salamanders, was also recorded.

In some cases, streamflows were too low to allow the use of electrofishing gear to sample a stream. In these cases, surveyors conducted visual observations to determine the presence/absence of fish. If a stream was completely dry, no fish survey was conducted; however other habitat features were noted.

Once the end of fish use was determined, GPS coordinates were taken to identify the location. The end of fish use was also marked on a USGS quad map. In addition, habitat measurements were made in the stream both above and below the end of fish use. These habitat measurements included bankfull channel width, current wetted width and stream gradient. Any natural or artificial barriers that resulted in the end of fish use were identified and described. Surveyors also included comments on instream and riparian zone habitat quality.

Culverts that were encountered during these surveys were evaluated for fish passage. Several measurements were taken at each culvert, including culvert length, diameter, slope, drop to pool below, depth of jump pool, bankfull width of stream and current wetted width of the stream. Surveyors also provided comments regarding the condition and type of culvert present and gave each culvert a subjective rating (no passage, poor passage, or fair passage) for fish passage.

In 1995, Rogue Watershed District personnel divided the Rogue Basin into 43 subbasins, so that fish presence surveys could be conducted in a systematic and efficient manor. Each year, surveyors are assigned a subbasin and each crew concentrates on surveying each stream in that subbasin before moving to a new area. If a subbasin had been started but was not completed during a previous season, surveys in those subbasins are continued the following year. Fish presence surveys are also conducted outside the selected subbasins in response to formal requests submitted to ODF by timber owners

In 2003, surveys were conducted in the following areas: Deer Creek drainage; Lower Applegate River drainage; and the Antelope Creek drainage. (Figure 1). Seven streams outside these areas were surveyed in response to formal requests from ODF.

RESULTS

During the 2003 field season, a total of 88 streams were surveyed, and over 12 miles of new fish-bearing (Class F) streams were identified (Table 1). Of the 88 streams surveyed, 31 (35.0%) supported populations of salmonids. Of these 31 streams, 13 contained cutthroat trout, 6 contained coho salmon, 7 had steelhead and 14 had unidentified salmonids present. Other fish species observed during these surveys included redbreast shiners, mosquitofish and sculpins. A total of 2.8 miles of coho habitat was discovered during this year's surveys. During these surveys, survey crews evaluated 31 culverts; of these, 13 were identified as complete barriers to fish passage.

In some streams, short distances of Class F streams were subtracted from our fish distribution maps. In these cases, unsurveyed streams that had been marked as fish-bearing based on professional judgement were found to have fish use lower in the drainage than what was indicated on the map. When a fish presence survey verified the end of fish use occurred lower than the point indicated on the map, stream miles above that point were subtracted. For the entire season, 3.9 miles of Class F streams were subtracted from the maps.

Status of Fish Presence Surveys through 2003

Rogue Basin

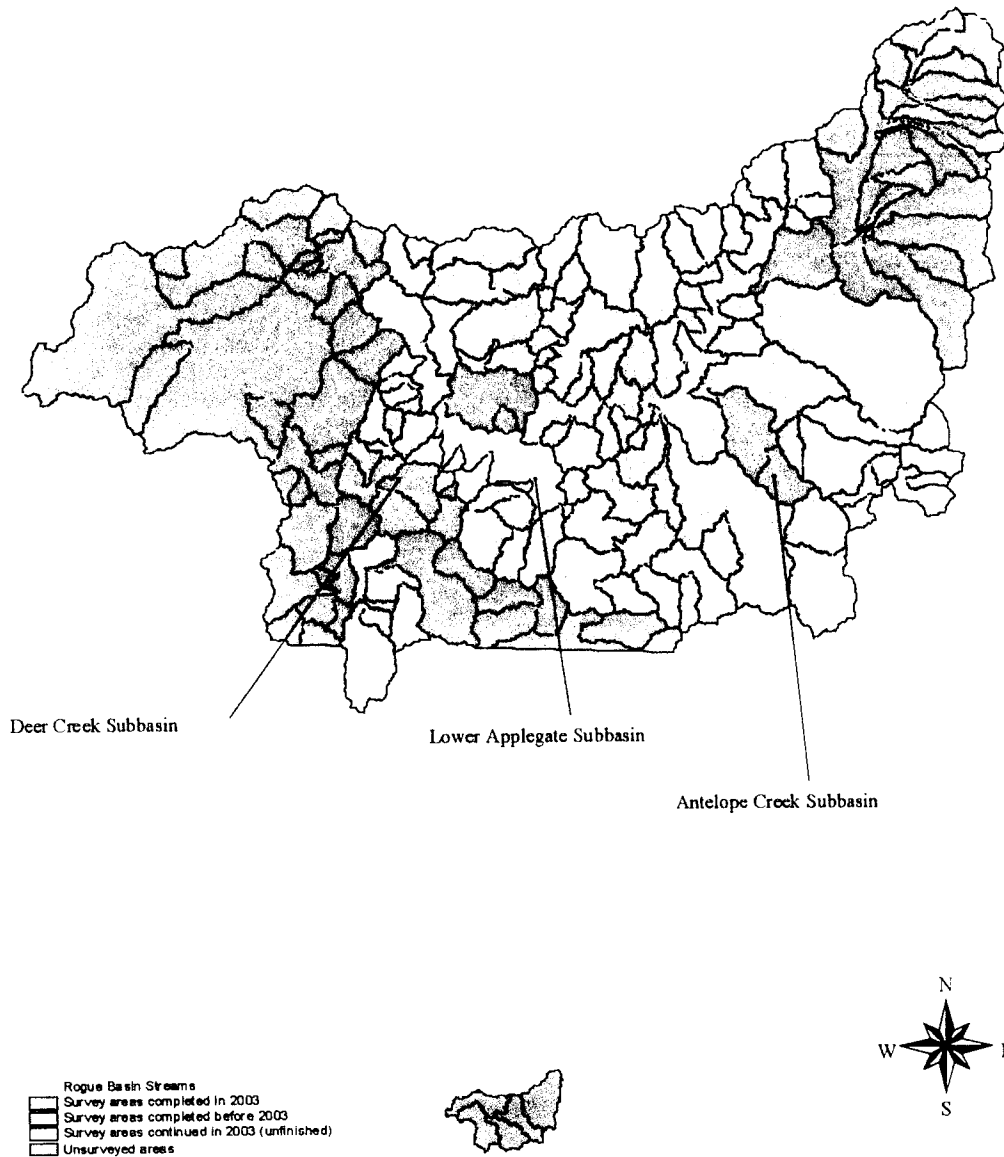


Figure 1. Locations of Rogue River subbasins surveyed during 2003 fish presence survey project.

Table 1. Summary of fish presence survey results in Rogue Basin streams, 2003.

Subbasin	# Streams Surveyed	# Miles Class F Added	# Miles Class F Subtracted	# Culverts Evaluated	# Impassable Culverts Identified
Deer Creek	24	2.7	0.4	7	2
Lower Applegate	35	4.7	2.5	13	5
Antelope Creek	21	0.2	0	1	0
Misc. Streams	8	5.2	1.0	10	6
Totals	88	12.8	3.9	31	13

DISCUSSION

As a result of fish presence surveys conducted in the Rogue Basin in 2003, nearly 13 miles of fish-bearing streams were identified and added to fish distribution maps. These streams will receive protection from timber harvest activities as Class F streams in accordance with the Forest Practices Act. In addition, the Rogue Watershed District fish distribution database has been updated to reflect this new information on salmon, steelhead and trout use in the basin. This database is used by district personnel on a daily basis for evaluating the need for fish screening requirements for new water rights, classifying streams for local planning departments for enforcement of stream setback requirements and updating Essential Salmonid Habitat maps used by the Division of State Lands for Removal/Fill permit evaluation. The fish distribution, stream habitat and barrier information collected during these surveys has also been entered into a statewide database administered by ODFW's StreamNet program.

While 13 miles of Class F streams were identified during this year's surveys, that total might have been higher if sections of stream had been accessible by the survey crew. In some cases, private landowners could not be reached or they denied our survey crew access to their property, so the end of fish use could not be determined for those streams.

Another important accomplishment of this year's surveys was the evaluation of 31 culverts for fish passage. Information for each of these culverts has been entered into the Rogue Watershed District barrier database. Barriers in this database can now be prioritized based on the severity of the barrier, species present, and miles of habitat above the barrier. ODFW will continue to work cooperatively with public agencies and private landowners that own or maintain these barriers to improve fish passage at high priority sites. At present, there are over 1,130 barriers listed in the Rogue Watershed District database.

The Rogue Basin has been divided into 43 subbasins for the purpose of conducting fish presence surveys in an efficient manor. Including the 2003 field season, surveys in 24 of these subbasins have been completed since 1995. Surveys in another subbasin have been started and are close to completion. The OWEB grant for this project has been exhausted, so we will be seeking additional funding to continue these surveys for the next several years in an attempt to have the remaining subbasins surveyed.

ACKNOWLEDGMENTS

I would like to thank the Oregon Watershed Enhancement Board for providing funding for this project. I would also like to thank the Rogue Basin Coordinating Council for supporting this project and serving as the applicant for the OWEB grant, and Lu Anthony for administering the OWEB grant. The Butte Falls Resource Area of the Bureau of Land Management provided half of the personnel for the survey crews and part of the equipment used for the surveys. Thanks also go to the many private landowners that graciously allowed our survey crews access to survey streams on their property.

LITERATURE CITED

- ODF (Oregon Department of Forestry) and ODFW (Oregon Department of Fish and Wildlife). 1995. Surveying forest streams for fish use. Oregon Department of Forestry, Salem OR and Oregon Department of Fish and Wildlife, Portland, OR. Joint publication, 30 pp.
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