

The logo consists of five stylized, wavy blue lines of varying lengths, stacked vertically, representing water or waves. 

# Yakima Tributary Access & Habitat Program

## Annual Report

**FY 2015**

April 1, 2015 – March 31, 2016

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Conservation and Development Council

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U.S. Department of Energy  
Bonneville Power Administration  
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**Project No. 2007-398-00**

**Contracts 00068444 (Capital)**  
**Contracts 00068714 (Expense)**

**June 2016**

The Yakima Tributary Access and Habitat Program (YTAHP) objectives are to screen surface water diversions, restore fish passage and enhance salmonid habitat. The program focus is on Yakima River Tributaries that historically supported salmonids and on riparian areas where access is restored. YTAHP was formed during 2001 in large part in response to listings of steelhead and bull trout as threatened under the Endangered Species Act to address issues of landowner liability and to support fish resources. Since its inception and first BPA contract in 2002, and early projects in 2003, YTAHP has implemented 156 projects in Yakima River tributaries including: screened 291 cubic feet per second (47,355 Acre Feet) water screened, trusted 44 cfs (3,407 AF), revegetated 211 acres and 15.0 miles of stream bank and added 220 miles of rearing and spawning habitat. The program has expended more than \$9.1 million toward habitat restoration.

This report covers program activity for FY 2015 from April 1, 2015 through March 31, 2016 and includes one contracting periods between the South Central Washington Resource Conservation & Development Council (RC&D) and Bonneville Power Administration (BPA). The YTAHP project number is 2007-398-00 and the contract numbers for this period are 00068444 (capital) and 00068714 (expense).

The funding from BPA supports YTAHP activities described in this report and enables YTAHP to construct *projects* as well as maintain *program* planning and administration, support project development, including planning, design and permitting, and conduct landowner outreach and coordination. Additionally, YTAHP participants may apply to other funding sources to enhance project implementation capabilities. These supplemental sources include WA Salmon Recovery Funding Board, WA Department of Ecology, Community Salmon Funds and other local, state and federal programs.

The RC&D maintains contracts with the following YTAHP participating entities: Kittitas County Conservation District (KCCD), North Yakima Conservation District (NYCD), Washington Department of Fish and Wildlife (WDFW) and Yakama Nation (YN). These contracts are supported by funding from BPA. Additional YTAHP partners include the Kittitas Conservation Trust (KCT), Mid-Columbia Fisheries Enhancement Group (MCFEG) and Benton Conservation District that may or may not have project-specific direct contracts for services, but may attend YTAHP meetings, seek permit assistance or offer collaboration on various project elements, such as permits, design or revegetation.

BPA funding for FY15 supported the implementation of 10 projects, ongoing riparian vegetation and site maintenance on 11 projects and provided significant work toward project development, permits, design and/or funding for an additional 13 projects. The FY15 completed projects saw the screening of 16.2 cfs of diverted surface water, trusting of water and improved screening, habitat and passage in 10 streams in the Yakima Basin. YTAHP also leveraged 1.9 million dollars in funding from other sources committed to project implementation.

The report summary includes links to previous YTAHP Annual Reports, the YTAHP Strategic Plan and YTAHP Biological Monitoring Reports. Below is a list of YTAHP accomplishments for FY15, including constructed projects, and projects receiving ongoing revegetation maintenance, and/or or significant planning activity.

**Kittitas County - Completed Projects**

1. **Cherry Creek-Jacobs-** This project was located on Cherry Creek which is a tributary of the Wilson Creek complex. Wilson Creek enters the Yakima River at RM 147. The project deals with the operation of the fish screen that was installed in 2012 and needs modifications in order to maximize its efficiency. The area of installation is subject to large volumes of sediment and trash and these factors have hampered flow capabilities of the screen. A gantry was installed in 2015 to allow the fish screens to be removed by WDFW for modification and maintenance. KCCD
2. **Cherry Creek Tributaries-** This phase of the project included installation of a NOAA compliant screening device on one new pump station along with sprinkler conversion project funded separately. The pump diversion is located on Parke Creek immediately below the confluence of Caribou and Parke Creeks. Parke Creek is a tributary to Cherry Creek which is a tributary to Wilson Creek which is a tributary to the Yakima River at RM 147. The screen was installed on the pump intake to prevent the entrainment of fish into the irrigation system that diverts nearly 1.0 cfs and 140 acre-feet of water per irrigation season. The installation of the pump station will lead to the decommissioning of the original diversion on Caribou Creek. KCCD
3. **Caribou Creek – Gibb-** This project was part of the Cherry Creek Tributaries in the previous contract. The Gibb diversions are a series of four structures on Caribou Creek near the City of Kittitas (between stream miles 4.2 and 4.6). At the location of the upper site, a structure was built in 2008 to include fish screens and a fishway and with a capacity to consolidate all of the diversions to this point. At that time, only the two upper diversions were consolidated to that point. In order for the lower two to be consolidated as well, a sprinkler project was necessary on the west side of the property and a pipeline installed on the east side. The sprinkler project was constructed and completed in 2015 that connected the upper of the lower two diversions to the structure built in 2008. Work toward completing the consolidation by installing a pipeline on the eastside will continue, after which the two lower diversion structures will be modified/removed to accommodate fish passage. KCCD
4. **Ellensburg Water Company at Coleman Creek –** This project is part of an effort to remove passage barriers and screen diversions in the lower 5 miles of Coleman Creek. The project included installation of a siphon to pass the canal under the creek, replacing the existing pipe for the creek to pass under the canal, thereby providing fish passage and fully separating the creek and the canal. A 96" diameter pipe was installed, along with inlet and outlet structures, pipes and other appurtenances. The project also included replacement of the existing irrigation water diversion that was un-screened and created a fish passage barrier, with a new diversion structure with both a fish screen and a fishway. The diversion now includes flow meters and automated headgates as well. The project was constructed over a five-month period with assistance from five matching sources, including two Ecology grants (\$364,000), a Salmon Recovery Funding Board grant (\$483,313), Kittitas County Public works agreement (29,484) and Ellensburg Water Company (\$20,000).

- 5. East Branch Wilson Creek-KVFR Diversion-** Mid-Columbia Fisheries implemented a fish habitat and riparian enhancement project on approximately 775 linear feet of East Branch Wilson Creek beginning in August 2015. On approximately 550 linear feet of stream, crack willow was limbed where it was the only vegetation shading the stream and completely removed where there was enough other desirable vegetation to continue providing shade for the stream. Limbed crack willow was treated with an aquatically approved glyphosate treatment to prevent resprout of the cut limbs. After the crack willow treatment and check dam removal, straw wattles were installed at the water's edge throughout the disturbed area. A total of five trees with rootwads were installed; one location had two rootwads and the remaining were single installations. Within the disturbed area, nine 11-foot tall Ponderosa Pine and six eight-foot tall aspen were planted and the area was drill seeded. In fall 2015 the banks were densely livestaked with 1,000 cuttings of native cottonwood, dogwood and willow and a diverse assemblage of approximately 2,365 native trees and shrubs were planted

**Riparian Revegetation, Weed Management and Other Project Maintenance**

- M1. Jack Creek Floodplain Restoration Project-** (FY09, RM 0-0.5): Plant and fencing maintenance. MCFEG.
- M2. Reecer Creek–Floodplain Restoration Project-** (Construction FY10/11) Significant revegetation efforts occurred in FY11-FY12, including irrigation of 5,000 native plants, 5,000 livestakes, weed management and seeding remaining 52 acres of upland areas to native grasses. Plant maintenance and survival monitoring. Lower portion of project (where most flooding occurs) is growing thousands of volunteer riparian plants. Project is seeking another additional funding to continue vegetation management. MCFEG.
- M3. Cherry Creek-** (Construction 2012) – Plant maintenance. KCCD
- M4. Red Bridge Rd Project-** (Construction 2013) – Plant maintenance. KCCD
- M5. Parke Creek-** (Construction FY15) Revegetation as part of the Parke Creek Eslinger and Parke Creek Dodge fish passage projects (diversion removals/modification) KCCD

**Kittitas County Significant Planning, Permitting and/or Engineering**

- P1. Caribou Creek-Cortese/Sorenson Project-** (RM 0.77, 1.17, 1.92, and on Parke Creek)): Design is still underway for the “Cherry Creek Tributaries” projects including the Cortese/Sorenson, Nylander/Eslinger and Dodge diversions for fish screen and fish passage at this irrigation diversion. KCCD.
- P2. Cle Elum River Side-Channel Restoration and ELJs-Phase 2-** (RM 5-7): The KCT held two Technical Working Group Meetings to inform stakeholders in the basin of the project design alternatives. This interaction led to completion of the 100% design package. The KCT made some design team changes to better meet the goals of the project to increase the habitat values of the lower Cle Elum River. Permit applications submitted for construction in FY14. KCT.
- P3. Coleman Creek–Ellensburg Water Company-** (RM 3.85): Final construction ready designs and specifications were completed for diversion screening and a siphon to pass the canal under the creek to provide for improved fish passage and to protect fish from entrainment in a 15cfs+ diversion. The project was advertised for bid in September 2015. KCCD.

- P4. Coleman Creek–Hanson/Poulsen Project-** (RM 2.13): This property associated with this project was sold in March 2014. After years of trying to contact an absentee landowner, a local landowner purchased the property and was interested in addressing screening and passage. A Salmon Recovery Funding Board grant application for construction was submitted in 2014 and was funded. Additional funds were requested in 2015 when other funding source options evaporated. The cost increase was approved by the Salmon Recovery Funding Board in December 2015. The landowner again applied for USDA Natural Resources Conservation Service funding for assistance with the on-farm components. KCCD
- P5. Gold Creek Habitat Improvements-** KCT began work on the Habitat Assessment and Hydrologic Analysis planning for this project and preparing for a TWG meeting to address the scope of work of the project engineers and inform of the results of the Data Inventory and Gap Analysis. KCT has completed the first of two years of water surface elevation monitoring in Gold Creek and the adjacent floodplain. The results were presented at a TWG meeting along with preliminary conclusions. Permitting and preparations are in place to begin the last year of monitoring and the development of conceptual designs. KCT.
- P6. Teanaway Forks Large Wood Trapping-** (West Fork RM 6, North Fork RM 5 & 6): Preliminary design of structures to trap large wood in order to form pools, capture gravels, and increase floodplain connectivity on forest land without risk to homes or other infrastructure. Change in land ownership has delayed project. MCFEG.
- P7. Wilson/Naneum Creek Basin–Watershed Assessment-** (RM 1.0 and upstream): Kittitas County Flood Control Zone District is facilitating an assessment of the Naneum-Wilson-Cherry watershed with goal of gathering information needed to develop a consensus on flood hazard reduction projects, irrigation and infrastructure improvements, and priority salmon recovery actions in the Wilson, Naneum and Cherry Creek watersheds, and to develop criteria, options and a schedule for subsequent projects. See the project webpage here: <http://www.co.kittitas.wa.us/public-works/flood/naneum-wilson-cherry-creek-watershed-assesment.aspx>. The Salmon Recovery Funding Board is providing \$354,000 in grant funds for this effort. YTAHP, via KCCD, is assisting with assessment and inventories of fish passage barriers, un-screened diversions and opportunities related to overlapping water rights from creeks and irrigation districts. KCCD participated in a training with Washington Department of Fish & Wildlife in order to receive an update on the protocol to inventory and assess barriers and un-screened diversions. KCCD.

**Yakima County – Completed Projects**

- 6. Cowiche Creek-Olsen-** Installation of a NOAA compliant fish screen on an irrigation pump diversion to prevent damage and entrainment to fish. The project is located at RM 6.5 on Cowiche Creek. Cowiche Creek is a tributary to the Naches River at RM 2.7. The screen will handle a flow rate of 0.19 cfs or 38.0 AF per irrigation season. NYCD
- 7. Cowiche Creek-Floodplain Restoration Phase 2-** (RM 1–1.3): Removed concrete debris, riprap and abandoned railroad berm along right bank of Cowiche Creek on multiple parcels, placement of wood and rock structures in stream, and revegetation of disturbed areas. Work on Crandall property completed, including dike and riprap removal, and floodplain and riparian enhancements. MCFEG.
- 8. N.F. Cowiche Creek-Borrogo Trust Water-** (RM 5) Establishment of .08 cfs and 16 AF of a NF Cowiche Creek water right into Washington States Trust Water program. NYCD & TU.

**Riparian Revegetation, Weed Management and Other Project Maintenance**

- M6. Ahtanum Creek-La Salle Project-** (FY11, RM 2.5): Plant maintenance and weed control on 16 acres and 2,900 feet of stream bank. NYCD, YN.
- M7. Ahtanum Creek-Herke Ranch-** (FY13, RM 23): Plant maintenance and weed control. NYCD.
- M8. Cowiche Creek-CCC/Jennerjohn/Funkhauser-** (FY 11-13, RM 2.1): Plant maintenance and weed control. MCFEG
- M9. Cowiche Creek-Lamas-** (FY09, RM 3+): Plant maintenance and weed control. MCFEG
- M10. Cowiche Creek- CCWUA Diversion Removal and Trust Water -** (FY14, RM 7): Plant maintenance and weed control. NYCD
- M11. Nile Creek-Matson Diversion Fish Screening-** (FY11-12, RM 3.0): Plant maintenance and weed control. NYCD.

**Yakima County Significant Planning, Permitting and/or Engineering**

- P8. Naches River-Nelson Dam Improvements-** (RM 0.5): Planning and project development activities include City of Yakima consolidation and change in point of diversion at lower Cowiche Creek to Naches River at Nelson Dam, redesign of fish screening facilities in conjunction with redesign of Nelson dam to improve upstream and downstream fish passage and improve sediment and flood conveyance across the dam. Activities will facilitate fish passage barrier removal at the mouth of Cowiche Creek. Multiple agency project including BOR, City of Yakima, Yakima County, WDFW, Naches Cowiche Canal Company. Anticipated implementation FY16 or beyond. NYCD.

- P9. Cowiche Creek-Water Quality Enhancement Project-** (RM 7.4): Riparian buffer establishment, riparian and wetland restoration and off-channel watering system installation. Implementation ongoing in FY14-16. NYCD.
- P10. Cowiche Creek-Nedrow Riparian and Instream Habitat Enhancement Project-** (RM 8): Riparian buffer establishment, riparian and wetland restoration and off-channel watering system installation. Implementation in FY16-17. NYCD.
- P11. Little Rattlesnake-Road 1501 Relocation-** Using YTAHP technical review process only. Anticipated implementation in FY14. MCFEG.
- P12. Cowiche Creek-Naches-Cowiche Canal Siphon-** (RM 0.6) Planning and project development to provide fish passage over canal company siphon that creates a seasonal low flow fish passage barrier. Anticipated Implementation FY16. NYCD.
- P13. Ahtanum Creek-Herke Ranch South Bank Fish Screening and Habitat Enhancement-** Planning and project development to provide fish screening and floodplain enhancement activities on the south bank of Ahtanum Creek. The project is located on Ahtanum Creek at RM 25.3. Ahtanum Creek is a tributary to the Yakima River at RM 106.9. NYCD

**Note:** Non-YTAHP Assessment planned for lower Wide Hollow Creek that should help in prioritizing work in this sub-watershed.

**Notes:**

cfs – Cubic feet per second, measure of water flow in instantaneous volume past a point.

RM - River mile is a measure of distance in miles along a river or stream from its mouth (RM 0.0) and is used as a project locator.

## ACKNOWLEDGEMENTS

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## LIST of ACRONYMS

ACOE	US Army Corps of Engineers
AID	Ahtanum Irrigation District
BLM	US Bureau of Land Management
BPA	Bonneville Power Administration
BOR	US Bureau of Reclamation
cfs	cubic feet per second
CREP	Conservation Reserve Enhancement Program
CWA	Federal Clean Water Act
DAHP	WA Department of Archaeology and Historic Preservation
Ecology	WA Department of Ecology
EPA	US Environmental Protection Agency
EQIP	Environmental Quality Incentives Program (NRCS)
ESA	Endangered Species Act
FRIMA	Fisheries Restoration and Irrigation Mitigation Act
HPA	Hydraulic Project Approval
JARPA	Joint Aquatic Resources Permit Application
KCCD	Kittitas County Conservation District
KCT	Kittitas Conservation Trust
KCWP	Kittitas County Water Purveyors
MCFEG	Mid-Columbia Fisheries Enhancement Group
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanographic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NYCD	North Yakima Conservation District
PI	Fish Passage Priority Index
RC&D	So. Central WA Resource Conservation & Development Council
RFEG	Regional Fisheries Enhancement Groups
SFRB	WA Recreation & Conservation Office Salmon Recovery Funding Board
SEPA	Washington State Environmental Policy Act
SSHEAR	Salmonid Screening, Habitat Enhancement, and Restoration Section
SPI	Screening Priority Index
TWG	Technical Work Group
USFS	United States Forest Service
USFWS	United States Fish & Wildlife Service
WDFW	Washington Department of Fish and Wildlife
WE	Work Element
YTAHP	Yakima Basin Tributary Access and Habitat Program
YN	Yakama Nation

# Yakima Tributary Access & Habitat Program

## 1. INTRODUCTION

The Yakima Tributary Access & Habitat Program (YTAHP) was organized to cooperatively restore salmonid passage to Yakima River tributaries that historically supported salmonids and to improve habitat in areas once access is restored. More specifically, the program screens surface water diversion structures to prevent fish entrainment into artificial waterways; provides for fish passage at man-made barriers, such as diversion dams, culverts, siphons and bridges; enhances in-stream and riparian habitat; and provides information and assistance to landowners interested in contributing to the improvement of water quality, water reliability, fish recovery and riparian habitat.

Beginning in 2000, the idea behind YTAHP developed from a number of groups actively engaged in natural resource management, watershed restoration, irrigation management and/or landowner assistance in the Yakima River Basin. These groups included the Kittitas County Conservation District (KCCD), North Yakima Conservation District (NYCD), Kittitas County Water Purveyors (KCWP), US Bureau of Reclamation (Reclamation, US BOR), Washington Department of Fish and Wildlife (WDFW), Ahtanum Irrigation District (AID) and the South Central Washington Resource Conservation and Development Council (RC&D).

These participating partners submitted two grant applications under the 2000 provincial review process for the Columbia Plateau and another for the 2001 Action Plan. The Northwest Power Planning and Conservation Council (NPPCC) conducted a three-year rolling review of fish and wildlife proposals to identify proposals for BPA funding starting in FY 2000. This rolling Provincial Review solicited, reviewed and prioritized project proposals to implement its Fish and Wildlife Program. See Appendix A for summary.

The Yakama Nation (YN) also participated in the early stages of the program's development and in fiscal year 2004 the Yakama Nation Safe Passages program was incorporated into YTAHP. Additional funding to help cover the Safe Passages projects was included in the fiscal year 2005 YTAHP budget. The KCWP, BOR and AID are no longer active in the program. Collectively, the WDFW, KCCD, NYCD, YN, RC&D as well as the Mid-Columbia Fisheries Enhancement Group (MCFEG), Kittitas Conservation Trust (KCT) and Department of Ecology (Ecology) are referred to as the YTAHP Core Team.

This report covers YTAHP activities funded entirely or in part by the Bonneville Power Administration (BPA) project 2007-398-00 during FY15 (April 1, 2015 - March. 31, 2016), including contract numbers 00068444 (capital) and 00068714 (expense). BPA funding for FY15 supported the implementation of 10 projects, ongoing riparian vegetation and site maintenance on 11 projects and provided significant work toward project development, permits, design and/or funding for an additional 13 projects. The FY15 completed projects saw the screening of 16.2 cfs of diverted surface water, trusting of and improved screening, habitat and passage in 10 streams in the Yakima Basin. YTAHP also leveraged 1.8 million dollars in funding from other sources committed to project implementation.

## **2. BACKGROUND**

The Yakima River is a tributary to the Columbia River and is located in Kittitas, Yakima and Benton Counties in south central Washington. Native salmon populations in the Yakima River Basin have declined from historic levels. The significance of these declines is reflected in listings under the Endangered Species Act (ESA). The Middle Columbia steelhead distinct population segment, which includes the Yakima Basin, was listed by National Marine Fisheries Service [NMFS, or NOAA Fisheries], as threatened under the ESA on March 25, 1999 (64 FR 14517). The U.S. Fish and Wildlife Service (USFWS) listed the Columbia River bull trout distinct population segment, including the Yakima Basin, as threatened on June 10, 1998.

Since these listings, numerous watershed planning and salmon recovery efforts in the Yakima Basin have occurred. Most watershed plans and recovery documents list barrier removal and diversion screening as priorities for fish recovery, including: the Yakima Salmon Recovery Plan, Yakima Limiting Factors Analysis, federal Biological Opinions and the Yakima River Basin Watershed Management Plan. Habitat quality is also identified as a key factor limiting the productivity of these listed species.

Since the early 1980s, there has been a screening program primarily addressing Yakima River mainstem diversions through the Fish Passage and Protective Facilities Program, lead by the US Bureau of Reclamation with BPA Fish and Wildlife Program funding, Phase I (1980s) and Phase II (1990s to 2006). In spite of these significant past efforts, there are still many unscreened diversions and other passage and habitat challenges for fish in the Yakima Basin tributaries. Currently, there may be several hundred complete or partial fish passage barriers remaining in Yakima River tributaries. Many of these barriers are dams and unscreened diversions associated with early water rights and are located on private property.

## **3. PROGRAM OVERVIEW**

The program was created to support salmon recovery efforts by assisting landowners. YTAHP addresses surface water diversion screening, fish passage and riparian habitat in Yakima tributaries (Figure 1) using a well coordinated, prioritized approach. The program is cooperative in nature, engages a dedicated permit specialist and uses the unique role of Conservation Districts to assist property owners, on a voluntary basis, to address needs.

Participating YTAHP entities funded through Project 2007-398-00 are the South Central Washington Resource Conservation & Development Council (RC&D), Kittitas County Conservation District (KCCD), North Yakima Conservation District (NYCD) and Washington State Department of Fish and Wildlife (WDFW). Others working on the YTAHP core team include the Kittitas Conservation Trust (KCT), Mid-Columbia Fisheries Enhancement Group (MCFEG), Yakama Nation (YN), Benton Conservation District (BCD) and WA Department of Ecology. The program participants then work with local, state and federal agencies, landowners, municipalities and non-profits to implement projects. See Table 1. YTAHP Roles and Responsibilities.

### **3.1. Administration**

The RC&D maintains an agreement with BPA and currently administers contracts locally with the KCCD, NYCD, and WDFW to implement YTAHP. The RC&D's mission is to fa-

Facilitate natural resource and rural economic development projects across the three counties in the Yakima Basin and fits well with YTAHP approach. The RC&D holds contracts with core team members, with each member (KCCD, NYCD & WDFW) vouchering to the RC&D for program related expenses. The RC&D then vouchers to BPA monthly and reimbursements are distributed to each RC&D subcontractor to cover eligible costs.

The RC&D handles grant administration, accounting, invoice voucher preparation, maintaining PICSES inputs, coordinating with BPA Contract Officer on contracting requirements, budget tracking, work element categories, monitoring, project updates; annual reporting and scheduling core team meetings.

### **3.2. Program Management**

The RC&D and core team members jointly manage the program, including program organization, program consistency preparing and updating the YTAHP Strategic Plan, various presentations and outreach, monitoring plan development and implementation, finding and organizing technical support and training, producing the program annual plans and other functions as necessary. The core team includes those entities funded under BPA through the RC&D and others invited to participate, currently the KCT, MCFEG, BCD, YN and Ecology.

The original YTAHP Strategic Plan was drafted in 2001 to provide a framework for the Program. The Strategic Plan is considered a work in progress and has been amended periodically (2004, 2007, 2016). The Strategic Plan includes the program scope, organizational structure, communication objectives, stream survey approach, barrier prioritization method, and options for project implementation and funding. As stream survey data is compiled, individual tributary reports are prepared which identify stream conditions and potential projects. Individual projects are initiated as interested landowners approach YTAHP members and project plans are developed that include permit needs, engineered designs, budgets and likely implementation scheduling.

The first BPA support for YTAHP was from the Drought Action Plan in FY02 (see <http://www.nwppc.org/fw/projectselection/actionplan/Default.htm>). Additionally BPA funding has been through the Provincial Review process from FY03 through FY13 and anticipated through FY18 (see <http://www.nwppc.org/fw/program/Default.htm>). Additional funding for project implementation is regularly sought from the WA State Salmon Recovery Funding Board (SRFB), WA Department of Ecology, various USFWS and WDFW programs, Irrigation Efficiencies and other cost share programs through the Natural Resource Conservation Service, Washington State Conservation Commission, and other state and federal programs.

### **3.3. Project Development & Implementation**

To prepare the groundwork for project implementation, initial program steps included an examination of existing stream conditions. Stream assessments were conducted on all or parts of many of the streams in the Yakima River Basin. These stream assessments were generally conducted by conservation district staff walking the streams to identify man-made structures, such as bridges, culverts; canal crossings (often siphons) and irrigation diversion structures. These structures were then evaluated for fish passage and diversion fish screening compliance with state and federal criteria.

Once the stream assessments were done and potential projects identified, they were prioritized using an existing protocol (from the WDFW Salmonid Screening, Habitat Enhancement, and Restoration (SSHEAR) Section (now Environmental Restoration Technical Assistance (ERTA), see <http://wdfw.wa.gov/hab/tapps/erta.htm>). High priority passage and screening projects, those with high biologic value for salmon recovery, were targeted for project development. In addition, projects of other priority levels were considered if there were strong landowner support and involvement, readily available funding or opportunities for broad collaboration and long-term benefits. The current program focus is removing barriers on the lower few miles of most tributaries and on several high quality tributaries to their headworks. Updates to these stream assessments are anticipated and new project priority numbers determined.

The Conservation Districts have historically played a role in working with landowners on resource management needs and provide technical assistance to that end and help coordinate with funding sources. Under YTAHP, the Conservation Districts continue this type of assistance and may also act as liaison with regulatory agencies and engineering service providers, and community outreach. The Conservation Districts also assist in coordinating complementary programs such as irrigation efficiencies, Environmental Quality Incentives Program (EQIP), Conservation Reserve Enhancement Program (CREP), etc.

As stream assessments were completed, the KCCD and NYCD each held public meetings to share the stream assessment data with local stakeholders (landowners, water right holders, municipalities, special districts) and describe resources available (YTAHP, NRCS, SRFB, Ecology, etc) and inquire as to stakeholder's interests as they related to passage, screening, stream habitat and salmon recovery efforts generally. YTHAP projects were developed by working with landowners who expressed interest in diversion screening, dam modification, irrigation conversions (gravity to pressurized systems), water conservation and riparian habitat enhancement. As projects advance, a YTAHP core team member works with project owner on desired outcomes, design needs, funding sources and engages engineers and prepares grant applications. The sponsor also works with the technical workgroup (TWG) and permit specialist on project permitting and design review.

### **3.4. Engineering and Technical Support**

A critical component for project development is engineering services including designs and specifications, procurement of materials, and scheduling, contracting and construction oversight. The Washington Conservation Commission cluster engineers provide some design and engineering, job cost estimates, and assistance in the permitting process. In addition, private engineering firms are often hired to perform or supplement this work.

YTAHP recognizes the need for consistent technical review of proposed projects to identify specific goals, objectives and risks and facilitate project development such that the goals are met upon implementation. The technical work group (TWG) consists of project sponsors, agency and/or consulting engineers, the permit coordinator, biologists, and regulators. The TWG will complete and review engineering designs and provide technical assistance on all proposed projects. The TWG provides a consistent review group with common guidelines and engineering standards and includes regulatory agencies to assist in the preparation of permit application packages such that permit review and issuance is rapid and effective. Engineers, fabricators, and biologists from

the WDFW, conservation district engineers, consulting engineers, and other stakeholders and regulators will participate in the TWG. In addition, members of the technical work group will facilitate and coordinate biological monitoring for YTAHP projects.

### **3.5. Regulatory Compliance**

YTAHP has developed good working relationships with federal, state and local agencies to obtain the necessary permits and approvals for each project. The YTAHP-dedicated permit specialist (at WDFW) and project sponsor work with appropriate regulatory agencies and local jurisdictions to submit applications for permits or approvals. This includes preparation of permit applications and environmental documents and offering site tours for environmental evaluation purposes. The landowner and their representatives may also participate. The relationships built since YTAHP formally began in 2002 help to develop confidence in the Program and promote responsiveness throughout project permitting and implementation. The cooperative nature of this program and early involvement is intended to accelerate permitting and thereby completion of projects.

WDFW is the lead for completing environmental and cultural resource permit application packages. The WDFW permit specialist works with regulatory entities, namely BPA, NOAA Fisheries, USFWS, WA Department of Archaeology and Historic Preservation (DAHP), USACOE, Ecology, local governments, and others as appropriate.

Permits and approvals may include Joint Aquatic Resource Permit Application (JARPA) which includes the WDFW Hydraulic Permit Approval (HPA), US ACOE Grading Permit (Clean Water Act § 404) and Ecology Water Quality Certification (CWA § 401), and Shorelines Management Act Critical Areas (local jurisdiction); and State Environmental Policy Act (SEPA) environmental checklist; Cultural Resources concurrence (DAHP); and for ESA Section 7 consultation the National Environmental Policy Act (NEPA checklist), NOAA and USFWS issuance of or concurrence with a Biological Opinion, and National Historic Preservation Act § 106 consultation.

### **3.6. Monitoring**

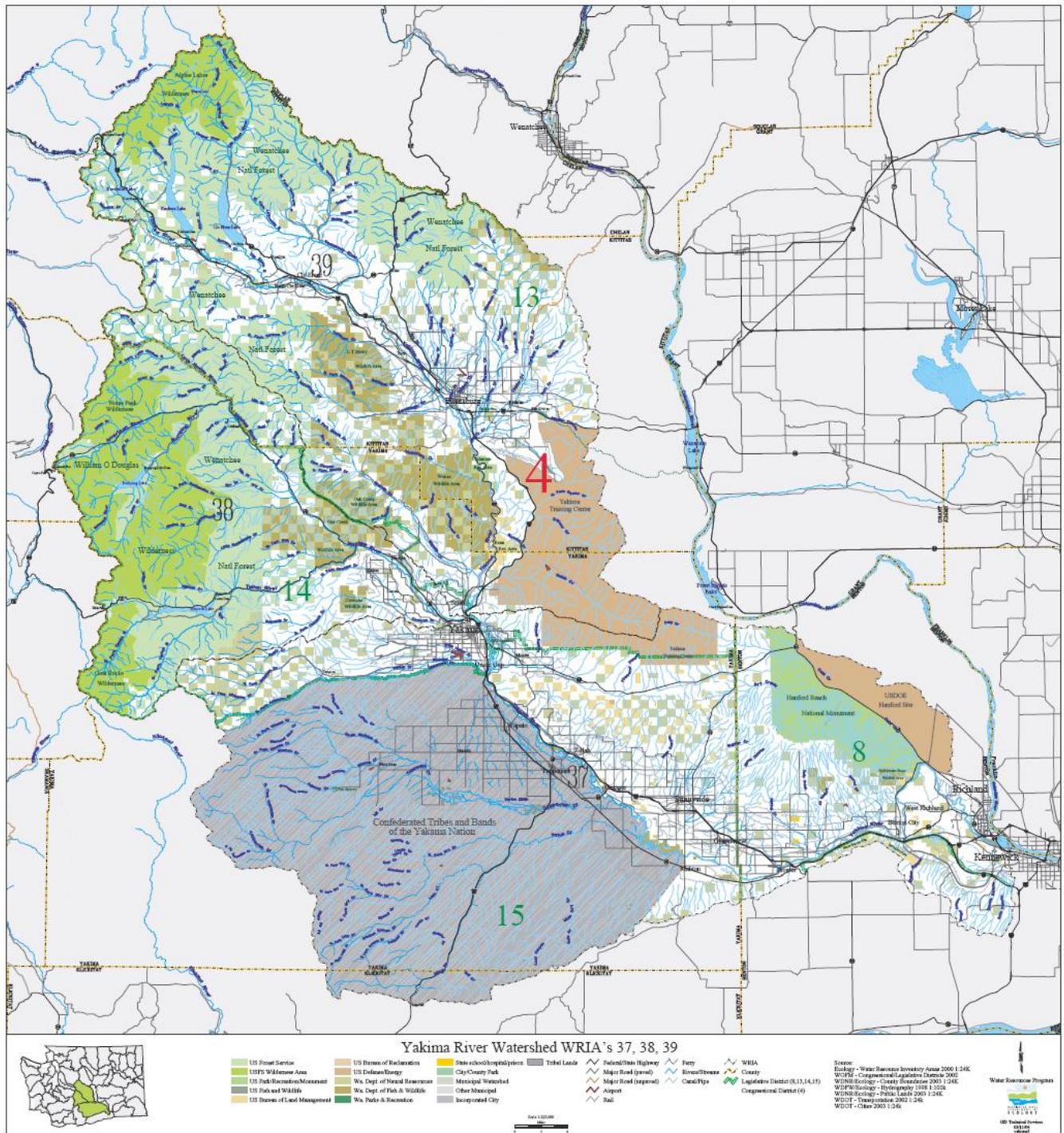
YTAHP uses three types of monitoring to assist in targeting program activities: program progress, project implementation, and project effectiveness. First, the core team regularly examines the progress of the Program to determine if changes are needed to improve organization, facilitate project development, and modify outreach, etc. Second, the project sponsor and permit lead determine whether projects are being implemented as designed and in conformance with permit conditions. Third is the biological monitoring of the fisheries resource prior to and after project implementation with respect to species presence/absence above and below project sites. Completed projects are assessed for their effectiveness in achieving intended goals.

Over time, ongoing biological monitoring will determine if implementation of projects is protecting existing fishery resources, and/or expanding fish distribution into desired tributaries. YTAHP intends to work with other basin fisheries programs and experts in determining the effectiveness of salmon recovery efforts basin wide. The coordination of monitoring efforts across programs would also reduce duplication and provide a more comprehensive picture of the effects of fish recovery efforts in the Yakima Basin.

**Table 1. Yakima Tributary Access & Habitat Program Roles and Responsibilities.**

<b>Team</b>	<b>Membership</b>	<b>Responsibilities</b>
<b>Administration</b>	RC&D	Grant administration, accounting, invoice preparation, coordinating with BPA and core team on budget tracking and project updates for grantor(s), BPA reporting
<b>Program Management (Core Team)</b>	RC&D WDFW KCCD NYCD YN KCT YBJB Ecology MCFEG YN	Program organization and schedules, assigning tasks and tracking progress, program consistency, forming partnerships, updating Strategic Plan, producing applications for funding, finding and organizing technical support, producing the program annual plans, and other functions as necessary. Open invitation to BPA to attend and participate. USFWS attends semi-regularly.
<b>Project Sponsors</b>	Core Team	Plan and coordinate projects, facilitate landowner and community involvement and outreach, oversee project management
<b>Technical Work Group (TWG)</b>	WDFW NOAA USFWS YN KCCD US ACOE NYCD Ecology BPA YBJB KCT Local Governments DAHP	The technical work group (TWG) provides the engineering, biological, and fabrication technical assistance. The permitting coordinator (housed at WDFW) participates with the TWG as well. Entities participation varies as appropriate for the needs of each project.

**Figure 1. Map of Yakima River Basin**



#### **4. SCOPE of WORK, WORK ELEMENTS and ACCOMPLISHMENTS**

The Scope of Work during the April 2015 through March 2016 period for the Yakima Tributary Access and Habitat Program is generally to improve fish access, protect fish from entrainment in diversion and improve habitat. Specific project level objectives are proposed annually by name and creek for a variety of passage barrier removals, diversion screening and riparian enhancements.

To meet this scope and objectives, numerous work elements (WE) were implemented for the program administration, project management, project design and permitting and habitat improvements were pursued. (For a further description of work elements, see: <http://efw.bpa.gov/contractors/statementsofwork.aspx>.)

##### **General Work Elements to Identify Projects**

Coordination (Project, Agency, Landowners) YTAHP core team members participate in community education, landowner outreach and project coordination efforts. Many of the barriers to fish passage, surface water diversions, and/or riparian habitat are on private property. YTAHP projects are voluntary, meaning they are only done with a willing landowner. The Conservation Districts, particularly, have long histories of working with the private landowners. The cooperative relationships they have with landowners and the trust they have developed enable them to engage landowners about YTAHP objectives and their potential participation in restoration efforts. This YTAHP outreach reaches thousands of people annually through news articles and presentations, tours, conferences and fairs. In addition, YTAHP frequently acts as liaison between landowners and agencies during project development.

Produce Inventory or Assessment (Stream Surveys) Early on YTAHP conducted stream surveys to prepare an inventory of existing conditions, including locations of diversions, barriers, culverts, etc. By 2004 more than 240 miles of stream were surveyed following the WDFW-SSHEAR protocol. Much of the priority tributaries have been surveyed, however there here may be additional survey work on specific reaches as needed or as landowner approvals are granted. Updates to these surveys are planned.

Identify, Prioritize, and Select Potential Projects The Stream Surveys provide data which can be used to assist in prioritizing projects. Using the data collected, projects are given PI and/or SPI numbers. The WDFW SSHEAR process uses a Fish Passage Priority Index (PI) model to consolidate the many factors which affect project feasibility into a manageable framework. The Screening Priority Index (SPI) model was created to consolidate the many variables relevant to water diversions. Potential projects are discussed by the YTAHP core team and the Technical Work Group (consulting engineers, agency experts). PI and SPI scores are given considerable weight but practical considerations, such as landowner willingness, are also included in the selection process. Projects with a high potential benefit to fish passage, screening, and/or habitat enhancement, which also have a potential for implementation are selected for further development through the engineering and permitting phase.

##### **Work Elements to Develop Projects**

Engineering Engineered designs are developed in-house at the Conservation Districts or through consulting engineers contracted through YTAHP. One or more conceptual designs are prepared and presented to the TWG for critical input. A preferred design is

then pursued for the project and used for permitting and budgeting purposes. Project engineering can be a lengthy process. Many federal and state agencies have an interest in the design of the project and the construction methods used so there are often several iterations of the design to meet regulatory criteria.

Permitting Almost every project requires numerous permits or approvals from several local, state and federal agencies and jurisdictions. YTAHP is structured so that these agencies are involved early on in project design. A primary purpose of the YTAHP process is that projects are designed and constructed in conformance with agency regulations and the best available science. Even with early involvement by the reviewing agencies it generally takes four to six months or longer to complete the permitting process.

Pump Screens The installation of a pump screen is a relatively simple project but it does entail evaluating the irrigators' needs, pumping equipment water source and obtaining the necessary permits and authorizations. YTAHP partners generally work with the WDFW Fish Screening Program staff and irrigation vendors to complete this evaluation and specify the type of pump screen needed.

### **Work Elements to Construct Projects**

Install Fish Screens, Remove Barriers, Increase Instream Habitat, Plant Vegetation  
During this reporting period 10 projects were constructed, 11 projects received vegetation management and an additional 13 projects received significant planning, design and/or secured funding, including some or all of these work elements:

- |   |                                      |
|---|--------------------------------------|
| Increase Instream Habitat Complexity          | Install Fence                        |
| Realign, Connect and/or Create Channel        | Plant Vegetation                     |
| Install Fish Screen                           | Install Well                         |
| Remove/Install Diversion                      | Install Siphon                       |
| Install Flow Measuring Device                 | Produce Design and/or Specifications |
| Produce Inventory and/or Assessment           | Enhance Floodplain                   |
| Create, Restore and/or Enhance Wetland        | Install Fish Passage Structure       |
| Operate or Maintain Habitat/Passage/Structure |                                      |

### **List of Accomplishments**

The following is a list of YTAHP accomplishments for reporting period April 1, 2015 through March 31, 2016:

## FY15 YTAHP Accomplishments

April 2015 through March 2016

Project No. 2007-398-00

Contracts: 68444 (Capital) 68714 (Expense)

### Kittitas County - Completed Projects

- 1. Cherry Creek-Jacobs-** This project was located on Cherry Creek which is a tributary of the Wilson Creek complex. Wilson Creek enters the Yakima River at RM 147. The project deals with the operation of the fish screen that was installed in 2012 and needs modifications in order to maximize its efficiency. The area of installation is subject to large volumes of sediment and trash and these factors have hampered flow capabilities of the screen. A gantry was installed in 2015 to allow the fish screens to be removed by WDFW for modification and maintenance. KCCD
- 2. Cherry Creek Tributaries-** This phase of the project included installation of a NOAA compliant screening device on one new pump station along with sprinkler conversion project funded separately. The pump diversion is located on Parke Creek immediately below the confluence of Caribou and Parke Creeks. Parke Creek is a tributary to Cherry Creek which is a tributary to Wilson Creek which is a tributary to the Yakima River at RM 147. The screen was installed on the pump intake to prevent the entrainment of fish into the irrigation system that diverts nearly 1.0 cfs and 140 acre-feet of water per irrigation season. The installation of the pump station will lead to the decommissioning of the original diversion on Caribou Creek. KCCD
- 3. Caribou Creek – Gibb-** This project was part of the Cherry Creek Tributaries in the previous contract. The Gibb diversions are a series of four structures on Caribou Creek near the City of Kittitas (between stream miles 4.2 and 4.6). At the location of the upper site, a structure was built in 2008 to include fish screens and a fishway and with a capacity to consolidate all of the diversions to this point. At that time, only the two upper diversions were consolidated to that point. In order for the lower two to be consolidated as well, a sprinkler project was necessary on the west side of the property and a pipeline installed on the east side. The sprinkler project was constructed and completed in 2015 that connected the upper of the lower two diversions to the structure built in 2008. Work toward completing the consolidation by installing a pipeline on the eastside will continue, after which the two lower diversion structures will be modified/removed to accommodate fish passage. KCCD
- 4. Ellensburg Water Company at Coleman Creek –** This project is part of an effort to remove passage barriers and screen diversions in the lower 5 miles of Coleman Creek. The project included installation of a siphon to pass the canal under the creek, replacing the existing pipe for the creek to pass under the canal, thereby providing fish passage and fully separating the creek and the canal. A 96" diameter pipe was installed, along with inlet and outlet structures, pipes and other appurtenances. The project also included replacement of the existing irrigation water diversion that was unscreened and created a fish passage barrier, with a new diversion structure with both a fish screen and a fishway. The diversion now includes flow meters and automated headgates as well. The project was constructed over a five-month period with assistance from five matching sources, including two Ecology grants (\$364,000), a Salmon Recovery Funding Board grant (\$483,313), Kittitas County Public works agreement (29,484) and Ellensburg Water Company (\$20,000).

- 5. East Branch Wilson Creek-KVFR Diversion-** Mid-Columbia Fisheries implemented a fish habitat and riparian enhancement project on approximately 775 linear feet of East Branch Wilson Creek beginning in August 2015. On approximately 550 linear feet of stream, crack willow was limbed where it was the only vegetation shading the stream and completely removed where there was enough other desirable vegetation to continue providing shade for the stream. Limbed crack willow was treated with an aquatically approved glyphosate treatment to prevent resprout of the cut limbs. After the crack willow treatment and check dam removal, straw wattles were installed at the water's edge throughout the disturbed area. A total of five trees with rootwads were installed; one location had two rootwads and the remaining were single installations. Within the disturbed area, nine 11-foot tall Ponderosa Pine and six eight-foot tall aspen were planted and the area was drill seeded. In fall 2015 the banks were densely livestaked with 1,000 cuttings of native cottonwood, dogwood and willow and a diverse assemblage of approximately 2,365 native trees and shrubs were planted

### **Riparian Revegetation, Weed Management and Other Project Maintenance**

- M1. Jack Creek Floodplain Restoration Project-** (FY09, RM 0-0.5): Plant and fencing maintenance. MCFEG.
- M2. Reecer Creek–Floodplain Restoration Project-** (Construction FY10/11) Significant revegetation efforts occurred in FY11-FY12, including irrigation of 5,000 native plants, 5,000 livestakes, weed management and seeding remaining 52 acres of upland areas to native grasses. Plant maintenance and survival monitoring. Lower portion of project (where most flooding occurs) is growing thousands of volunteer riparian plants. Project is seeking another additional funding to continue vegetation management. MCFEG.
- M3. Cherry Creek-** (Construction 2012) – Plant maintenance. KCCD
- M4. Red Bridge Rd Project-** (Construction 2013) – Plant maintenance. KCCD
- M5. Parke Creek-** (Construction FY15) Revegetation as part of the Parke Creek Eslinger and Parke Creek Dodge fish passage projects (diversion removals/modification) KCCD

### **Kittitas County Significant Planning, Permitting and/or Engineering**

- P1. Caribou Creek-Cortese/Sorenson Project-** (RM 0.77, 1.17, 1.92, and on Parke Creek): Design is still underway for the “Cherry Creek Tributaries” projects including the Cortese/Sorenson, Nylander/Eslinger and Dodge diversions for fish screen and fish passage at this irrigation diversion. KCCD.
- P2. Cle Elum River Side-Channel Restoration and ELJs-Phase 2-** (RM 5-7): The KCT held two Technical Working Group Meetings to inform stakeholders in the basin of the project design alternatives. This interaction led to completion of the 100% design package. The KCT made some design team changes to better meet the goals of the project to increase the habitat values of the lower Cle Elum River. Permit applications submitted for construction in FY14. KCT.
- P3. Coleman Creek–Ellensburg Water Company-** (RM 3.85): Final construction ready designs and specifications were completed for diversion screening and a siphon to pass the canal under the creek to provide for improved fish passage and to protect

fish from entrainment in a 15cfs+ diversion. The project was advertised for bid in September 2015. KCCD.

- P4. Coleman Creek–Hanson/Poulsen Project-** (RM 2.13): This property associated with this project was sold in March 2014. After years of trying to contact an absentee landowner, a local landowner purchased the property and was interested in addressing screening and passage. A Salmon Recovery Funding Board grant application for construction was submitted in 2014 and was funded. Additional funds were requested in 2015 when other funding source options evaporated. The cost increase was approved by the Salmon Recovery Funding Board in December 2015. The landowner again applied for USDA Natural Resources Conservation Service funding for assistance with the on-farm components. KCCD
- P5. Gold Creek Habitat Improvements-** KCT began work on the Habitat Assessment and Hydrologic Analysis planning for this project and preparing for a TWG meeting to address the scope of work of the project engineers and inform of the results of the Data Inventory and Gap Analysis. KCT has completed the first of two years of water surface elevation monitoring in Gold Creek and the adjacent floodplain. The results were presented at a TWG meeting along with preliminary conclusions. Permitting and preparations are in place to begin the last year of monitoring and the development of conceptual designs. KCT.
- P6. Teanaway Forks Large Wood Trapping-** (West Fork RM 6, North Fork RM 5 & 6): Preliminary design of structures to trap large wood in order to form pools, capture gravels, and increase floodplain connectivity on forest land without risk to homes or other infrastructure. Change in land ownership has delayed project. MCFEG.
- P7. Wilson/Naneum Creek Basin–Watershed Assessment-** (RM 1.0 and upstream): Kittitas County Flood Control Zone District is facilitating an assessment of the Naneum-Wilson-Cherry watershed with goal of gathering information needed to develop a consensus on flood hazard reduction projects, irrigation and infrastructure improvements, and priority salmon recovery actions in the Wilson, Naneum and Cherry Creek watersheds, and to develop criteria, options and a schedule for subsequent projects. See the project webpage here: <http://www.co.kittitas.wa.us/public-works/flood/naneum-wilson-cherry-creek-watershed-assesment.aspx>. The Salmon Recovery Funding Board is providing \$354,000 in grant funds for this effort. YTAHP, via KCCD, is assisting with assessment and inventories of fish passage barriers, un-screened diversions and opportunities related to overlapping water rights from creeks and irrigation districts. KCCD participated in a training with Washington Department of Fish & Wildlife in order to receive an update on the protocol to inventory and assess barriers and un-screened diversions. KCCD.

## **FY15 YTAHP Accomplishments**

April 2015 through March 2016

Project No. 2007-398-00

Contracts: 68444 (Capital) and 68714 (Expense)

### **Yakima County – Completed Projects**

- 6. Cowiche Creek-Olsen-** Installation of a NOAA compliant fish screen on an irrigation pump diversion to prevent damage and entrainment to fish. The project is located at RM 6.5 on Cowiche Creek. Cowiche Creek is a tributary to the Naches River at RM 2.7. The screen will handle a flow rate of 0.19 cfs or 38.0 AF per irrigation season. NYCD
- 7. Cowiche Creek-Floodplain Restoration Phase 2-** (RM 1–1.3): Removed concrete debris, riprap and abandoned railroad berm along right bank of Cowiche Creek on multiple parcels, placement of wood and rock structures in stream, and revegetation of disturbed areas. Work on Crandall property completed, including dike and riprap removal, and floodplain and riparian enhancements. MCFEG.
- 8. N.F. Cowiche Creek-Borrogo Trust Water-** (RM 5) Establishment of .08 cfs and 16 AF of a NF Cowiche Creek water right into Washington States Trust Water program. NYCD & TU.

### **Riparian Revegetation, Weed Management and Other Project Maintenance**

- M6. Ahtanum Creek-La Salle Project-** (FY11, RM 2.5): Plant maintenance and weed control on 16 acres and 2,900 feet of stream bank. NYCD, YN.
- M7. Ahtanum Creek-Herke Ranch-** (FY13, RM 23): Plant maintenance and weed control. NYCD.
- M8. Cowiche Creek-CCC/Jennerjohn/Funkhauser-** (FY 11-13, RM 2.1): Plant maintenance and weed control. MCFEG
- M9. Cowiche Creek-Lamas-** (FY09, RM 3+): Plant maintenance and weed control. MCFEG
- M10. Cowiche Creek- CCWUA Diversion Removal and Trust Water -** (FY14, RM 7): Plant maintenance and weed control. NYCD
- M11. Nile Creek-Matson Diversion Fish Screening-** (FY11-12, RM 3.0): Plant maintenance and weed control. NYCD.

### **Yakima County Significant Planning, Permitting and/or Engineering**

- P8. Naches River-Nelson Dam Improvements-** (RM 0.5): Planning and project development activities include City of Yakima consolidation and change in point of diversion at lower Cowiche Creek to Naches River at Nelson Dam, redesign of fish screening facilities in conjunction with redesign of Nelson dam to improve upstream and downstream fish passage and improve sediment and flood conveyance across the dam. Activities will facilitate fish passage barrier removal at the mouth of Cowiche Creek. Multiple agency project including BOR, City of Yakima, Yakima County, WDFW, Naches Cowiche Canal Company. Anticipated implementation

FY16 or beyond. NYCD.

**P9. Cowiche Creek-Water Quality Enhancement Project-** (RM 7.4): Riparian buffer establishment, riparian and wetland restoration and off-channel watering system installation. Implementation ongoing in FY14-16. NYCD.

**P10. Cowiche Creek-Nedrow Riparian and Instream Habitat Enhancement Project-** (RM 8): Riparian buffer establishment, riparian and wetland restoration and off-channel watering system installation. Implementation in FY16-17. NYCD.

**P11. Little Rattlesnake-Road 1501 Relocation-** Using YTAHP technical review process only. Anticipated implementation in FY14. MCFEG.

**P12. Cowiche Creek-Naches-Cowiche Canal Siphon-** (RM 0.6) Planning and project development to provide fish passage over canal company siphon that creates a seasonal low flow fish passage barrier. Anticipated Implementation FY16. NYCD.

**P13. Ahtanum Creek-Herke Ranch South Bank Fish Screening and Habitat Enhancement-** Planning and project development to provide fish screening and flood-plain enhancement activities on the south bank of Ahtanum Creek. The project is located on Ahtanum Creek at RM 25.3. Ahtanum Creek is a tributary to the Yakima River at RM 106.9. NYCD

**Note:** Non-YTAHP Assessment planned for lower Wide Hollow Creek that should help in prioritizing work in this sub-watershed.

**Notes:**

cfs – Cubic feet per second, measure of water flow in instantaneous volume past a point.

RM - River mile is a measure of distance in miles along a river or stream from its mouth (RM 0.0) and is used as a project locator.

## 5. SUMMARY

Overall, the Yakima Tributary Access & Habitat Program has and will continue to address specific goals of the Yakima Sub-basin Plan, Yakima Basin Steelhead Recovery Plan and other documents providing similar guidance. The program has achieved important enhancements that support aquatic species, particularly resident and anadromous fish, including ESA listed species. The involvement of local conservation and irrigation entities as well as communication with local elected representatives has broadened the awareness of the program and enhanced its ability to achieve its objectives. In addition, the program accomplishments will leverage subsequent work through the engineering designs, procured materials and general cost share that this program has provided. Additional grant applications have been and will continue to be made to further support program objectives.

BPA funding for FY15 supported the construction of 10 projects, ongoing riparian vegetation and site maintenance on 11 projects and provided significant work toward project development, permits, design and/or secured funding for an additional 13 projects. The FY15 completed projects saw the screening of 16.2 cfs of diverted surface water and improved screening, habitat and passage in eight streams in the Yakima Basin. YTAHP also leveraged several hundred thousand dollars in funding from other sources committed to project implementation.

Future work under YTAHP may include: installation of properly screened diversions (both pump and gravity), removal of various fish passage barriers, improvement of habitat with fencing, planting of vegetation and installation of bridges for livestock crossing, stabilizing stream banks to reduce erosion, floodplain enhancement and various on-farm irrigation improvements. The program will also supplement work done under other local, state and federal programs that support water conservation and habitat projects. Completion of another year's effort has strengthened opportunities for working on the private lands in two counties which will be vital to future efforts by YTAHP and others to protect and enhance Yakima River Basin habitat. It is again important to emphasize that this work is done on a voluntary basis and shows substantial support by the private land-owners for pursuing projects of this type. Such support is essential to maximize future salmonid recovery efforts.

Public information on YTAHP can be found at the following Internet websites-

BPA publications:

- <http://www.cbfish.org/PiscesPublication.mvc/SearchByTitleDescriptionAuthorOrDate>
- Then enter "S Central Washington Resource Conservation and Development" in the "Organization of the Primary Author" box.

SCW RC&D YTAHP website: <http://scwrcd.org/ytahp.html>.

KCCD YTAHP website: <http://kccd.net/YTAHP.htm>.

NYCD YTAHP website: <http://northyakimacd.wordpress.com/projects-and-program/yakima-tributary-access-habitat-program-ytahp/>.

## REFERENCES

Biological Opinion, Reinitiation of Consultation on Operation of the Federal Columbia River Power System, Endangered Species Act-Section 7 Consultation. National Marine Fisheries Service, December 21, 2000.

Limiting Habitat Factors, Yakima River Watershed, Final Report. Washington State Conservation Commission, December 2001.

YTAHP Biological Monitoring Report, Yakima Tributary Access & Habitat Program, Washington Department of Fish and Wildlife, 2007.

See [http://www.scwrcd.org/docs/YTAHP\\_Monitoring\\_Report\\_for\\_2007.pdf](http://www.scwrcd.org/docs/YTAHP_Monitoring_Report_for_2007.pdf)

Yakima River Basin - Watershed Assessment. Tri-County Water Resources Agency, June 2000.

Yakima Subbasin Summary (draft). Northwest Power Planning Council, August 3, 2001.

See <http://www.nwppc.org/fw/subbasinplanning/yakima/plan/>

YTAHP Strategic Plan, Yakima Tributary Access & Habitat Program. 2002, updated 2007 and 2016. See [http://scwrcd.org/docs/YTAHP\\_Strategic\\_Plan\\_2016.pdf](http://scwrcd.org/docs/YTAHP_Strategic_Plan_2016.pdf)

### YTAHP Web Resources:

SCW RC&D Council, YTAHP: <http://scwrcd.org/ytahp.html>

NYCD, YTAHP: <http://northyakimacd.wordpress.com/projects-and-program/yakima-tributary-access-habitat-program-ytahp/>

KCCD, YTAHP: <http://kccd.net/YTAHP.htm>

MCFEG: <http://midcolumbiarfeg.com/>

KCT: <http://kittitasconservationtrust.org/>

WDFW, Salmon and Steelhead Conservation:

<http://wdfw.wa.gov/conservation/salmon/>

YN Fisheries: <http://host119.yakama.com/>

WA State JARPA (e-permitting):

<http://www.epermitting.wa.gov/site/jarpa/9983/jarpa.aspx>

**Appendices**

Appendix A: Award History

Appendix B: Annual Report History

Appendix C: FY15 Project Pictures

## APPENDIX A



### *Award History*

Process: **2001 Action Plan**  
Proposal: 2002-025-00 YTAHP  
Sponsor: Kittitas County Water Purveyors (subsequently the RC&D)  
Award: 2002: \$228,913 (\$5,543 not spent; June 02, shortened year)

Process: **2002 Provincial Review**  
Proposal: 2002-025-01 YTAHP  
Sponsor: Kittitas County Water Purveyors (subsequently the RC&D)  
Award: 2003: \$695,608 (\$25,990 not spent)  
2004: \$720,000 (\$24,612 not spent)  
2005: \$879,935 (\$64 not spent)  
2006: \$869,919 (\$10,080 not spent)

Process: **2007-2009 Provincial Review**  
Proposal: 2007-398-00 YTAHP  
2007-398-00 Yakima River Basinwide Tributary Passage & Flow  
(Combines 2002-025-01, 2003-001-00 and 2007-020-00)  
Sponsor: So. Central WA Resource Conservation & Development Council  
Award: 2007: \$879,996 (Expense \$121,723 and Capital \$758,273)  
2008: \$879,995 (Expense \$121,722 and Capital \$758,273)  
2009: \$879,999 (Exp \$121,726 and Cap \$758,273)  
2010: \$879,999 (Exp \$121,726 and Cap \$758,273)  
2011: \$879,999 (Exp \$121,726 and Cap \$758,273)  
2012: \$902,000 (Exp \$124,769 and Cap \$777,231)  
2013: \$897,732 (Exp \$127,605 and Cap \$770,127)

Process: **2013 Geographic Review**  
Proposal: 2007-398-00 Yakima River Basinwide Tributary Passage & Flow YTAHP  
Sponsor: So. Central WA Resource Conservation & Development Council  
Award: 2014: \$904,926 (Expense \$127,605 and Capital \$777,321)  
2015: \$904,926 (Expense \$479,834 and Capital \$425,092)  
2016: \$904,926 Expense  
2017:  
2018:

## APPENDIX B



### Yakima Tributary Access & Habitat Program

*Annual Reports*

Period: FY 2002  
Report: 2002-025-00 Yakima Tributary Access and Habitat Program  
ID: DOE/BPA-00009726-1  
Author: So. Central WA Resource Conservation & Development Council  
Date: April 2003

Period: FY 2003  
Report: 2002-025-01 Yakima Tributary Access and Habitat Program  
ID: DOE/BPA-00011926-1  
Author: So. Central WA Resource Conservation & Development Council  
Date: December 2003

Period: FY 2004 (Sep 03 – Oct 04)  
Report: 2002-025-01 Yakima Tributary Access and Habitat Program  
Contract: 00011926  
Author: So. Central WA Resource Conservation & Development Council  
Date: December 2004

Period: FY 2005 (Sep 04 – Oct 05)  
Report: 2002-025-01 Yakima Tributary Access and Habitat Program  
Contract: 11926  
Author: So. Central WA Resource Conservation & Development Council  
Date: October 2005

Period: FY 2006 (Oct 05 – Sep 06)  
Report: 2002-025-01 Yakima Tributary Access and Habitat Program  
Contract: 24722  
Author: So. Central WA Resource Conservation & Development Council  
Date: October 2006

Period: FY 2007 (Oct 06 – Mar 08)  
Report: 2002-025-01 Yakima Tributary Access and Habitat Program  
Contract: 24722  
Author: So. Central WA Resource Conservation & Development Council  
Date: August 2008

Period: FY 2008 (Apr 08 – Mar 09)  
Report: 2002-025-01 Yakima Tributary Access and Habitat Program  
Contract: 24722  
Author: So. Central WA Resource Conservation & Development Council  
Date: December 2009

## APPENDIX B



Annual Reports, cont

Period: FY 2009 (Apr 09 – Mar 10)  
Project: 2007-398-00 Yakima Tributary Access and Habitat Program  
Contract: 46802  
Author: So. Central WA Resource Conservation & Development Council  
Date: April 2010

Period: FY 2010 (Apr 10 – Mar 11)  
Project: 2007-398-00 Yakima Tributary Access and Habitat Program  
Contracts: 46802 Capital; 46861 Expense  
Author: So. Central WA Resource Conservation & Development Council  
Date: May 2011

Period: FY 2011 (Apr 11 – Mar 12))  
Project: 2007-398-00 Yakima Tributary Access and Habitat Program  
Contracts: 52299 Capital; 51799 Expense  
Author: So. Central WA Resource Conservation & Development Council  
Date: June 2012

Period: FY 2012 (Apr 12 – Mar 13)  
Report: 2007-398-00 Yakima Tributary Access and Habitat Program  
Contracts: 56617 Capital; 56682 Expense  
Author: So. Central WA Resource Conservation & Development Council  
Date: July 2013

Period: FY 2013 (Apr 13 – Mar 14)  
Report: 2007-398-00 Yakima Tributary Access and Habitat Program  
Contracts: 00060456/00064516 Capital; 00060457/00064515 Expense  
Author: So. Central WA Resource Conservation & Development Council  
Date: June 2014

Period: FY 2014 (Apr 14 – Mar 15)  
Report: 2007-398-00 Yakima Tributary Access and Habitat Program  
Contracts: 00064516 Capital; 00064515 Expense  
Author: So. Central WA Resource Conservation & Development Council  
Date: June 2015

Period: FY 2014 (Apr 15 – Mar 16)- pending  
Report: 2007-398-00 Yakima Tributary Access and Habitat Program  
Contract: 00068444 Capital; 00068714 Expense  
Author: So. Central WA Resource Conservation & Development Council  
Date: June 2016

Fish Passage Barrier Removal & Fish Screening, Kittitas County



Coleman Creek & EWC Intersection & Fish Barrier before Siphon Installation.



Old Coleman Creek- EWC Diversion- Fish Barrier.



Coleman Creek with Siphon for EWC Diversion Hidden Under the Creek.



New Coleman Creek- EWC Diversion with Fish Screen & Fishway for Passage.