## **COMMUNICATION PLAN**



Alternative Restoration Plans (ARP) & East Fork Lewis River ARP (Publication 21-10-0051)

#### **Overview**

This Communication Plan helps Ecology's leadership and staff respond to questions on TMDL Alternative Restoration Plans (ARP) in Washington State. Responses to frequently asked questions, key messages, and talking points are included in this plan.

Questions may also be referred to Devan Rostorfer (devan.rostorfer@ecy.wa.gov) or other subject matter experts listed at the end of this plan.

#### Situation

- The East Fork Lewis River Alternative Restoration Plan (ARP) is the first ARP published by Department of Ecology's Water Quality Program (SWRO) in Washington State. It is also the first ARP published in EPA's Region 10. (Publication Number 21-10-051)
- ARPs are a new planning and implementation tool used to achieve clean water in watersheds on Washington State's impaired waters list (303d list).
- ARPs are completed in advance of a traditional Total Maximum Daily Load (TMDL) study to expedite voluntary implementation of best management practices (BMPs) to improve water quality.
- The ultimate goal is to achieve clean water through implementation of the ARP, making a formal TMDL study unnecessary.
- In addition to the recent East Fork Lewis River ARP, Ecology's SWRO WQP is currently working on two additional ARP projects in the Burnt Bridge Creek and Lacamas Creek watersheds located in Clark County, Washington. These projects are scheduled to be complete by 2025.
- Other regions may also choose to develop ARP projects in the future.

#### Goal

- Communicate that TMDL Alternative Restoration Plans are a proven strategy to achieve clean water in polluted watersheds on Washington State's impaired waters list (303d list).
- Provide information on the new East Fork Lewis River TMDL Alternative Restoration Plan.

#### **Audience**

- Primary: Ecology's Executive Leadership Team, Management from the Water Quality Program, Southwest Regional Office Director, Vancouver Field Office Manager.
- Secondary: TMDL staff, Environmental Assessment Program staff, Nonpoint Source specialists, Water Quality Combined Funding Program grant managers.

**Contact:** Devan Rostorfer, Water Quality Specialist (TMDL Lead) October 2021



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East Fork Lewis River ARP Publication 21-10-0051

### **Communication Schedule**

Date	Action	Who
October 14, 2021	Presentation: Ecology All Staff Meeting	Devan Rostorfer
October 15, 2021	Publication	Chanele Holbrook
October 27, 2021	Website updates	Lara Henderson
October 29, 2021	TMDL Listserv / WQ Listserv	Lara Henderson
October 29,2021	East Fork Lewis River Partnership announcement	Devan Rostorfer
TBD	Press release	TBD
TBD	Blog	TBD
December 14, 2021	TMDL-VC Meeting	Devan Rostorfer, Ben Rau, and EPA

#### **Contacts**

Contact	Name, title, and email	
Media	Collen Keltz, Water Quality Communications Manager, <a href="mailto:colleen.keltz@ecy.wa.gov">colleen.keltz@ecy.wa.gov</a>	
	Jeff Zenk, Southwest Regional Communications Manager, <u>jeff.zenk@ecy.wa.gov</u>	
Project	Devan Rostorfer, Water Quality Specialist (TMDL Lead),	
Lead	devan.rostorfer@ecy.wa.gov	
Subject	SWRO	
Matter	Lawrence Sullivan, Unit Supervisor, <u>Lawrence.Sullivan@ecy.wa.gov</u>	
Experts	<ul> <li>Molly Gleason, Monitoring Specialist Molly.Gleason@ecy.wa.gov</li> </ul>	
	• Sheila Marcoe, Unit Supervisor, <a href="mailto:Sheila.Marcoe@ecy.wa.gov">Sheila.Marcoe@ecy.wa.gov</a>	
	<ul> <li>Andrew Kolosseus, Section Manager, <u>Andrew.Kolosseus@ecy.wa.gov</u></li> </ul>	
	HQ	
	Ben Rau, Policy Lead, <u>Ben.rau@ecy.wa.gov</u>	
	Lara Henderson, TMDL Program Lead, <u>Lara.Henderson@ecy.wa.gov</u>	
	Patrick Lizon Nonpoint Policy Lead, <u>Patrick.Lizon@ecy.wa.gov</u>	
	<ul> <li>Melissa Gildersleeve, Section Manger, Melissa.Gildersleeve@ecy.wa.gov</li> </ul>	
	FMS	
	Eliza Keeley-Arnold, Statewide Nonpoint Funding Program (Section 319)	
	eliza.keeley-arnold@ecy.wa.gov	
	EAP	
	Sheelagh McCarthy, Hydrogeologist, <u>Sheelagh.McCarthy@ecy.wa.gov</u>	
EPA	Jill Nogi, WA State TMDL Program Lead <u>nogi.jill@epa.gov</u>	
Region 10	Gunnar Johnson, TMDL Program, <u>Johnson.gunnar@epa.gov</u>	

### **Quick Facts**

- ARPs are a new planning and implementation tool used to achieve clean water in watersheds on Washington State's impaired waters list (303d list).
- ARPs are completed in advance of a traditional Total Maximum Daily Load (TMDL) study to expedite voluntary implementation of best management practices (BMPs) to improve water quality.
- The ultimate goal is to achieve clean water through implementation of the ARP, making a formal TMDL study unnecessary.
- The Department of Ecology transmitted the East Fork Lewis River Alternative Restoration Plan (ARP), and Bacteria and Temperature Source Assessment to EPA in October 2021.
- This ARP sets out a strategy to address high water temperatures and bacteria problems within the watershed.
- The plan addresses 38 impaired segments on the 2012 Water Quality Assessment (303(d) list). These waters were identified as priorities under the national measure WQ-27.
- We established the <u>East Fork Lewis River Partnership</u> in the summer of 2018 to help us start implementing actions identified in the Source Assessment and develop the ARP.
- Public comment was complete in August 2020. The final plan was complete in October 2021.

**Contact:** Devan Rostorfer, Water Quality Specialist (TMDL Lead) <a href="mailto:devan.rostorfer@ecy.wa.gov">devan.rostorfer@ecy.wa.gov</a> | 360-409-6693

# Frequently Asked Questions (FAQ) TMDLs vs. Alternative Restoration Plans

#### 1. What is a TMDL Alternative Restoration Plan (ARP)?

- Alternative Restoration Plans are a new planning and implementation tool used to achieve clean
  water in watersheds on Washington State's impaired waters list (303d list). ARPs are completed
  in advance of a traditional Total Maximum Daily Load (TMDL) study to expedite voluntary
  implementation of best management practices (BMPs) to improve water quality. The ultimate
  goal is to achieve clean water through implementation of the ARP, making a formal TMDL study
  unnecessary.
- Specifically, ARPs outline a strategy to implement BMPs that will reduce pollution enough to meet water quality standards, in advance of a TMDL.

#### 2. What information is included in Ecology's Alternative Restoration Plans?

- ARPs identify causes of water quality impairments and pollutant sources, and estimate the
  pollution reductions needed to meet water quality standards.
- ARPs also describe the implementation needed to reduce sources of pollution.
- ARPs outline the technical and financial assistance needed, and develops an information and education component.
- An implementation schedule, criteria to measure progress, and a monitoring plan to evaluate effectiveness of implementation efforts are also included in ARPs.

#### 3. What is the process to develop an Alternative Restoration Plan (ARP)?

- Alternative Restoration Plan provides a strategy to address sources of pollution in watersheds where pollutant challenges are mostly from nonpoint sources.
- One of the main questions Ecology tries to answer through an Alternative Restoration Plan is, "how much pollution needs to be reduced to meet water quality standards?"
- There are four main steps to Ecology's Alternative Restoration Plan process. First, Ecology completes water quality assessment, monitoring, and data collection. Second, Ecology completes a Source Assessment study to identify critical areas for water quality improvement and estimate the pollution reductions needed to meet water quality standards. Third, Ecology uses the results from a Source Assessment to develop an Alternative Restoration Plan, focused on implementation of BMPs to improve water quality. Finally, in step four, Ecology works with stakeholders to implement water quality BMPs necessary to achieve WQS.

Contact: Devan Rostorfer, Water Quality Specialist (TMDL Lead)
<a href="mailto:devan.rostorfer@ecy.wa.gov">devan.rostorfer@ecy.wa.gov</a> | 360-409-6693

## 4. How is an ARP different from a traditional Total Maximum Daily Load (TMDL) study?

- Unlike a traditional TMDL study, Alternative Restoration Plans do not establish waste load allocations for point source dischargers or permitted facilities.
- Instead, ARPs identify BMPs that need to be implemented to reduce nonpoint sources of pollution to meet water quality standards.
- These plans work best in watersheds where there is community support and active implementation happening on the ground.
- Effectiveness monitoring is the primary tool used to assess if progress is being made towards achieving water quality standards.

#### 5. When might a TMDL become necessary?

- If water quality standards are not achieved through implementation of the ARP, then a traditional TMDL, which establishes waste load allocations for point source dischargers, will be required.
- In the future, if land use change results in the presence of more point source dischargers and permitted facilities, than a traditional TMDL may be a more appropriate tool. This is only if water quality standards are not attained by the target date established in an ARP.

## 6. How does EPA review and accept ARPs? What happens when an ARP is complete?

- ARPs are transmitted to EPA for review and acceptance in a transmittal letter from Ecology's Water Quality Program to EPA.
- Once the ARP is reviewed and accepted by EPA, category 5 impaired waters on the 3030d list will be changed to category 5-alt waters in ATTAINS.
- Category-5alt is a new assessment category, which recognizes that an Alternative Restoration Plan has been developed for the watershed.

#### 7. How will Ecology track progress?

- ARPs include criteria to measure progress, interim milestones, and an effectiveness monitoring strategy, which are the primary tools to assess and track progress.
- Ecology will report on ARP implementation progress, and effectiveness monitoring will be completed through pollution identification and correction activities, and through monitoring completed by local partners.

Contact: Devan Rostorfer, Water Quality Specialist (TMDL Lead)

October 2021

#### 8. What is the timeline for achieving water quality standards?

- ARPs establish a timeline to achieve water quality standards and a commitment to periodically review the plan.
- Timelines may vary from watershed to watershed, and form impairment to impairment.
- In the East Fork Lewis River:
  - Ecology's goal is to achieve bacteria water quality standards by 2035, and temperature water quality standards by 2055.
  - A longer timeline has been established for temperature to allow time for trees to establish and reach site potential tree height.
  - Ecology will work with EPA to evaluate effectiveness monitoring results in 2035 to determine if implementation of BMPs has resulted in improved water quality, or if a traditional TMDL is necessary for bacteria.
  - Ecology will also work with EPA in 2055 to determine if temperature goals have been achieved, or if a traditional TMDL is necessary for temperature.
- When WQS are met, the Department of Ecology will delist 'category 5-alt' waters in accordance with Ecology's Policy 1-11. Effectiveness monitoring using temperature and *E. coli* will be the main tool to support delisting.

#### 9. What does EPA want Washington to include in an ARP?

- In 2015, the <u>EPA shared a memo with states</u> describing the information that Alternative Restoration Plans should include.
- According to EPA, "An alternative restoration approach is a near-term plan, or description of
  actions, with a schedule and milestones, that is more immediately beneficial or practicable to
  achieving water quality standards."
- Listed below are the components EPA looks for when reviewing Source Assessments Alternative Restoration Plans.
  - **Identification:** Identification of specific impaired water segments or waters addressed by the alternative restoration approach, and identification of all sources contributing to the impairment.
  - **Analysis:** Analysis to support why the State believes that the implementation of the alternative restoration approach is expected to achieve WQS





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- Action plan or implementation plan: An Action Plan or Implementation Plan to document the actions to address all sources of pollution and a schedule with clear milestones and dates, which includes interim milestones and target dates with clear deliverables.
- Available funding opportunities: Identification of available funding opportunities to implement the alternative restoration plan.
- Identification of stakeholder and partners: Identification of all parties committed, and additional parties needed.
- Estimate of when WQS will be achieved: An estimate or projection of the time when WQS will be met.
- Monitoring plan to evaluate effectiveness: Plans for effectiveness monitoring to demonstrate progress made toward achieving WQS, including an adaptive management and evaluation process.
- Commitment to evaluate plan: Commitment to periodically evaluate the alternative restoration approach to determine if it is on track to be more immediately beneficial or practicable in achieving WQS than pursuing the TMDL approach.

#### 10. How is an ARP different from a Section 319 watershed plan?

- Alternative Restoration Plans serve the dual function of achieving EPA's nine minimum elements for successful watershed plans. These plans are required for projects that are developed and implemented with Section 319 funding. These plans inform planning, implementation, and funding decisions at the watershed level.
- Listed below are the nine minimum elements of watershed planning. The nine minimum elements are similar to, but not the same as, EPA's considerations for ARPs.
  - **1.**Identify causes of impairment and pollutant sources.
  - 2. Estimate load reductions needed.
  - **3.** Describe nonpoint source implementation to achieve load reductions.
  - **4.** Estimate technical and financial assistance needed.
  - **5.** Develop information and education component.
  - **6.** Develop implementation schedule.
  - 7. Develop milestones and targets.
  - 8. Develop criteria to measure progress.
  - **9.** Monitor to evaluate effectiveness of implementation efforts.

# Frequently Asked Questions (FAQs) East Fork Lewis River Alternative Restoration Plan

#### 1. Background

- The East Fork Lewis River and its tributaries are on Washington State's impaired waters list (303d list) for warm water temperatures and bacteria pollution problem, which drives the need to develop a Total Maximum Daily Load (TMDL) as required by the Clean Water Act.
- Ecology has chosen to develop this TMDL Alternative Restoration Plan in advance of developing a TMDL in order to expedite the voluntary implementation of best management practices (BMPs) to improve water quality in the East Fork Lewis River.

#### 2. Priority areas for water quality improvement

- Priority areas for bacteria and temperature improvement are located in the middle and lower sections of the watershed.
- No sites sampled in the EFLR met water quality standards (WQS) for temperature.
- The middle watershed has the largest average shade deficit of 35 percent, with shade deficits of over 40 percent measured between river miles 9 to 13. These shade deficits are a high priority for riparian restoration to increase shade and help lower warm water temperatures.
- Priority areas to address bacteria are the Brezee and McCormick Creek tributaries, which are located in the lower watershed. To meet water quality standards, bacteria reductions of up to 86 to 96 percent are needed in Brezee and McCormick Creeks.
- In 2009, Ecology published the Surface Water/Groundwater Exchange along the East Fork Lewis River report. This report established priority river miles where the EFLR is gaining groundwater flows. These include river miles 4.6 to 8, 10.1 to 13.2 and river miles 26.9 to 29.

#### 3. What are priorities for implementation?

- Nonpoint source pollution is the primary source of water quality impairment in the East Fork
  Lewis River watershed causing increased bacteria levels and warm water temperatures. The
  priority subwatersheds for pollution reduction are Brezee, Jenny, and McCormick Creeks and
  Rock Creek North. These subwatersheds are not meeting water quality standards for bacteria
  and have the most significant water quality exceedances. All of these subwatersheds had
  significant bacteria exceedances measured in 2005-2006 and in 2017.
- **Riparian Restoration**: Increasing riparian restoration in the East Fork Lewis River tributaries will help make progress towards reducing warm water temperatures. In addition to the shade deficits identified on the mainstem, there are an estimated 20 to 30 river miles of riparian restoration needed in East Fork Lewis River tributaries.



- Septic Systems are one source of bacteria in the EFLR watershed. In 2020, there were an
  estimated 6,161 septic systems in the watershed, and 32 percent, or approximately 1,995 septic
  systems were considered noncompliant and needed inspections. An estimated 1,328
  noncompliant septic systems are located within 200 feet of a stream. A new septic system
  inspection and maintenance rebate program is being implemented in the watershed using
  funding from Ecology's Water Quality Combined Funding Program.
- Agriculture is one source of bacteria and temperature pollution in the watershed. In total, there
  are 855 agricultural parcels located in priority areas for water quality investigation and outreach.
  Along these river miles, there are 689 parcels within 200 feet of water. Funding for site visits,
  technical assistance letters, and conservation planning were recently awarded through Ecology's
  Water Quality Combined Funding Program.
- **Stormwater** is one of the primary sources of bacteria pollution in the EFLR watershed. In the *East Fork Lewis River Source Assessment*, the second highest bacteria concentrations measured in the watershed were discharging from a stormwater outfall in the City of La Center. Phase one priorities for stormwater management in the EFLR include bacteria source tracing, illicit discharge detection and elimination (IDDE) programming, bacteria source control activities, and comprehensive stormwater management planning

#### 4. What is the timeline for implementation?

- Ecology's goal is to address priority agricultural parcels by 2031 through technical and financial assistance, and priority noncompliant septic systems in the watershed by 2032 through septic system inspections, maintenance, and repair.
- The goal is to implement riparian restoration on 100 percent of the mainstem and tributaries by 2035, with the goal to achieve tree maturity by 2055 to 2065.
- Ecology will work with stormwater stakeholders to develop and implement stormwater activities (stormwater planning, IDDE, private stormwater facility inspections) by 2030, working towards the target of achieving stormwater retrofits on 1 percent of La Center's urban growth areas by 2035.
- If water quality has not improved, additional stormwater retrofits will be recommended for the City of La Center and throughout the watershed, working towards implementing BMPs on 10 percent of the total impervious surfaces in the watershed by 2065.
- Ecology will reassess if the watershed is meeting bacteria water quality standards for bacteria in 2035.
- Temperature effectiveness monitoring will be completed in 2055.

#### 5. How will Ecology track implementation and measure success?

- To document implementation progress, the Department of Ecology will publish a concise annual report highlighting implementation efforts and successes in the watershed.
- To develop this report, a survey will be sent to partners each year, to gather information on project and program implementation status, metrics, and outcomes. Implementation tracking will also be completed through Ecology's Water Quality Combined Funding Program.
- Metrics collected annually will be compared to the Criteria to Measure Progress that are established in the ARP.
- Annual reporting and project tracking specific to implementation of septic, stormwater management, and agriculture BMPs will occur until bacteria effectiveness monitoring is completed in 2035.
- Project tracking for implementation of riparian restoration and streamflow restoration projects will continue through 2055, when temperature effectiveness monitoring is completed.
- Results from the 2035 and 2055 effectiveness monitoring efforts will be published in formal effectiveness monitoring reports.

#### 6. How were stakeholders engaged?

- To achieve clean water, Ecology launched the East Fork Lewis River Partnership in May 2018 to work collaboratively with local, state, federal, and tribal governments, non-profits, and private landowners to develop and implement the East Fork Lewis River Alternative Restoration Plan.
- Since the Partnership kicked off, over 50 different partners from 30 different organizations have engaged in EFLR Partnership activities, including private landowners.
- These activities have included multiple EFLR Partnership meetings, smaller bacteria and temperature workgroups, and a targeted meeting to discuss private landowner technical assistance needs in Clark County.
- Ecology also hosted a grant project workshop to educate organizations on how to access grant funding for implementation. A water quality public town hall was also hosted to educate landowners on what they can do to restore clean water.

#### 7. Did the plan go out for public comment?

- In August 2020, Ecology hosted a public webinar to present the draft Alternative Restoration Plan.
- Ecology accepted public comments through September 2020 and published a Response to Comments Memo. Final comments were incorporated into the plan.
- Ecology also worked with the Environmental Protection Agency (EPA) to incorporate EPA considerations into the final ARP.

### **Success Stories**

- **Proactive Nonpoint Source Investigation:** Ecology implemented proactive nonpoint source investigation and windshield surveys in tributaries with known pollution issues. This included door-to-door outreach, sending mailers, and providing technical assistance to landowners.
- **Targeted Workshops:** Local organizations committed to hosting agricultural and septic system workshops in the watershed annually to help increase awareness of water quality issues.
- Manure Lagoon Decommissioning: Ecology identified a manure lagoon located directly
  upstream from a tributary with high bacteria levels recorded since 2005. We worked with
  Washington Department of Agriculture (WSDA), the City of Ridgefield, and a private developer to
  decommission and remove the manure lagoon, resulting in a large source of bacteria removed from
  the watershed.
- Monitoring: New partnerships were established to implement nonpoint source bacteria
  monitoring to find and fix sources of bacteria. Results were published in the <u>East Fork Lewes River</u>
  Watershed Bacteria Monitoring and Nonpoint Source Identification report in 2021.
- Source tracing and IDDE: Ecology supported the development of an interlocal agreement between the City of La Center and Clark County to implement microbial source tracking to confirm if bacteria was coming from human, livestock, dogs, or wildlife sources. This has resulted in illicit discharge detection and elimination (IDDE) work in the City of La Center, which has identified multiple residential properties that had sanitary sewer connected to stormwater infrastructure. These cross connections have been corrected, removing a major source of bacteria from the watershed.
- New Pollution Identification and Correction Program (Poop Smart Clark): Ecology staff have supported the development of a new Pollution Identification and Correction (PIC) program called Poop Smart Clark, which will begin implementation in State Fiscal Year 2022 (Federal Fiscal Year 2023). The goal of this program is to utilize monitoring and microbial source tracking to find and fix sources of bacteria pollution, to support targeted outreach to landowners to provide technical and financial assistance. Local partners were recently awarded approximately \$2.8 million dollars for implementation. This includes funding from USDA NRCS Regional Conservation Partnership Program (\$1.4 million), the Department of Ecology Water Quality Combined Funding Program (~\$500,000), the Washington State Conservation Commission, and the Lower Columbia Fish Recovery Board. The total funding award includes money to hire new staff and increase organizational capacity, as well as funding to administer a new septic system inspection and maintenance rebate program. There is also funding for agricultural site visits, private landowner technical assistance, and conservation planning to support agricultural BMP implementation. New education and outreach programs will also be developed.



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- Intended outcomes from Ecology's SFY 2022 investment in PIC activities, expected by 2024 include:
  - Outreach and education: Approximately 1,965 direct mailers will be sent to landowners to educate on water quality BMPs.
  - Door-to-door: Targeted door-to-door outreach will be completed to 400 landowners with septic system or livestock challenges.
  - Septic systems: Implementation of 350 septic system inspection rebates and 140 septic system maintenance rebates for tank pumping.
  - Agricultural technical assistance: Completion of site visits and technical assistance to 30 agricultural landowners with livestock.
  - Conservation planning: Development of conservation plans targeted towards water quality BMP implementation.
  - Implementation: Will be achieved through funding from USDA NRCS.
- **Temperature projects:** The East Fork Lewis River is a high priority for salmon recovery in the Lower Columbia region. Most of the mainstem riparian areas in the lower watershed have been acquired by Clark County Legacy Lands program for conservation purposes. Significant riparian restoration work has already been completed in these areas. Completed riparian restoration projects are documented in the ARP. Additionally, a Thermal Assessment of the watershed is currently underway by the Lower Columbia Estuary Partnership to identify opportunities to restore cold-water refuge areas. Restoration alternatives for priority cold-water refuge areas are expected by February 2022, with implementation to follow. The Ridgefield Pits restoration project is also currently underway to develop restoration alternatives for river miles 8 to 10, which have legacy impacts from mining activities. Implementation of the preferred alternative for river mile 8 to 10 is expected by 2025.

## **Key messages and talking points**

- Achieving clean water will require long-term cooperation, coordination, and collaboration across organizations and jurisdictions.
- Continued implementation of water quality BMPs is needed to achieve clean water, meet water quality standards, and support beneficial uses for people, fish, and wildlife.
- Major pollutant sources are from nonpoint source pollution including septic systems, agriculture, stormwater, and lack of riparian shade.
- Improving water quality is a shared responsibility.
- Achieving implementation goals will require shared investment from multiple funding sources including, federal, state, and local governments, as well as investment from private landowners, private business, philanthropic organizations, taxpayers, and ratepayers.
- Private landowner education and outreach to provide technical and financial assistance is needed to promote voluntary implementation of Best Management Practices (BMPs) necessary to protect water quality.



#### **Stakeholders**

Multiple local, regional, state, and federal governments, tribes, nonprofits, and private landowners have been engaged in East Fork Lewis River Partnership activities. Many Ecology staff have also provided technical assistance and resources to support water quality improvement in the watershed.

Organizations	Tribes and stakeholders
Tribal	Cowlitz Indian Tribe
Local and	Clark County Public Works, Clark County Community Development, Clark County
Regional	Public Health, City of La Center, City of Battle Ground, Yacolt, Clark Public
	Utilities, City of Vancouver, La Center Schools, Clark Conservation District, Clark
	Regional Wastewater District, Lower Columbia Fish Recovery Board, Southwest
	Washington Regional Transportation Council, and Lower Columbia Fish
	Enhancement Group.
State	Washington Department of Fish and Wildlife, Washington Department of Natural
	Resources, Washington Department of Transportation, Washington Department
	of Ecology, Washington State Conservation Commission, and Washington State
	University Clark County Extension
Federal	US Fish and Wildlife Service, US Forest Service, and US Department of Agriculture
	Natural Resources Conservation Service, USDA Farm Service Agency, Bonneville
	Power Administration, United States Environmental Protection Agency, NOAA
	Marine Fisheries Service.
Nonprofit	Lower Columbia Estuary Partnership, Columbia Land Trust, Watershed, Alliance of
	Southwest Washington, Friends of the East Fork, Friends of Clark County, Salmon
	Creek Fly Fishers, Clark-Skamania Fly Fishers, Trout Unlimited, Northwest Wild
	Fish Rescue, and the East Fork Community Coalition.
Private	Wapato Valley Mitigation and Conservation Bank, PC Trask & Associates,
	Interfluve, and Bonneville Power Administration.

#### **Related Publications**

- **2021:** East Fork Lewis River Watershed Bacteria Monitoring and Nonpoint Source Identification
- **2020:** Quality Assurance Project Plan appendix B3: SWRO Sampling Sites for 2019 & 2020 Monitoring Fecal Coliform Bacteria in western Washington Water Bodies
- 2018: East Fork Lewis River Watershed Bacteria and Temperature Source Assessment
- **2017**: Quality Assurance Project Plan Fecal Coliform Bacteria and Temperature Source Assessment (2017)
- 2009: Surface Water/Groundwater Exchange Along the East Fork Lewis River (2005)
- 2009: Streamflow Summary for Gaging Stations on the East Fork Lewis River, 2005–06
- 2005: Quality Assurance Project Plan Temperature and Fecal Coliform Bacterial Total Maximum

  Daily Load Study (2005)

## **Media Coverage**

- Streamflow issues on the East Fork a priority for local recovery groups
- East Fork partnership draft cleanup plan released
- East Fork partnership calls for restoration project proposals
- State to provide \$4M for six Clark County water projects
- Year-end report highlights East Fork restoration efforts
- Project aims to ease East Fork of Lewis River's woes
- Town hall on East Fork water quality set for June 3rd
- East Fork: Officials offer insight on elevated temperature, bacteria levels
- Partnership seeks to improve East Fork water quality