East Fork Lewis River

Partnership

for clean water

Notes from October 16, 2018

Work Session – Building the TMDL Alternative

To start "Building the TMDL Alternative," facilitated work sessions were conducted during the October 2018, Bacteria and Temperature Workgroup meetings. The goals of these work sessions were to understand opportunities, challenges, and what's needed to improve water quality in the East Fork Lewis River. The following notes were translated from the work sessions. These notes are a synopsis of varying opinions and insights from multiple stakeholders. These notes do not represent the views of the Department of Ecology or the East Fork Lewis River Partnership as a whole.

Bacteria - *Recommendation: Reduce Fecal Coliform Bacteria and Improve Water Quality*

Septic Systems

- Clark County currently has 34,500 septic systems and 30% (10,350) are out of compliance.
- Local partners are using microbial source tracking to understand sources of bacteria, and to prioritize areas for bacteria reduction and septic system improvements. There is interest in continuing this effort in the East Fork Lewis River.
- Developing a program to increase compliance with septic system inspection requirements is a priority to local partners.
- Priority areas for septic system improvements are watersheds that are impaired for bacteria, zones of contribution to drinking water sources, areas with dry season bacteria issues, or drainages with the most septic systems out of compliance.
- Creating partnerships to support septic system programs are important. Opportunities include partnerships for technical assistance and public education; and partnerships for funding and cost-share.
- Educational workshops related to bacteria reduction are often hosted in Southwest Washington. Some workshops have focused on training homeowners to self-inspect their septic systems, to increase compliance with septic inspection requirements.
- Issuing vouchers for septic system maintenance and repair at educational workshops was proposed as an idea to incentivize septic system improvements.
- Exploring opportunities for public-private-partnerships between governments, watershed groups, and private septic system companies can make it easier and more affordable for private homeowners to service their septic systems.
- Clark County Maps online and Online RME are good tools to support implementation.
- Septic systems have difference designs and inspection frequencies. Understanding differences in systems is important to long-term success.
- Encouraging property owners to connect to sewer, and encouraging larger setbacks from surface water for new septic systems can result in improvements to water quality.

Other

- There is currently limited ability to provide private landowners with technical assistance in Clark County. Increasing the Conservation District's capacity to provide private landowners with voluntary technical assistance is a priority.

- Landowner willingness to implement best management practices on their properties remains a challenge.
- There is an opportunity to address illicit connections and connect private homeowners to public sewer during road projects.
- Infiltration is one good stormwater best management practice to reduce bacteria loading.
- There is interest from Ecology's nonpoint source staff to develop a flow chart to showcase who should be called during different nonpoint source situations. (ex. septic, agriculture, illegal dumping, spills)

Temperature - *Recommendation: Restore Riparian and Stream Habitat*

Riparian plantings

- Multiple conservation easements, property acquisitions, and restoration projects have been implemented in the watershed. Currently, there are at least two potential projects to benefit temperature planned in the East Fork Lewis River. One is located in the lower portion of Mason Creek, and the other is in McCormick Creek.
- Education and outreach is needed to increase private landowner stewardship of natural resources. Examples include hosting educational workshops on native planting, tree planting, and vegetation maintenance; as well as educating private landowners on the benefit of preserving trees. The real-estate industry was identified as a potential avenue to educate homeowners.
- Creating a "Backyard Habitat" education and implementation program could help increase outreach to private property owners. However, landowner willingness remains a challenge.
- In general there is a need for more organizations or more small businesses to take on tree planting projects. It is often challenging to leverage volunteers to plant trees on private properties due to liability concerns, and WCC/AmeriCorps members often have limited availability. More capacity to support riparian planting and invasive species management projects on private properties is desired.
- Considering opportunities to plant more conifers (where appropriate) can have positive benefits to temperature.
- Significant progress has been made to implement restoration and tree planting projects. Effectiveness monitoring to understand how temperatures may have changed post implementation would be valuable.
- Considering how stream flashiness can influence the success of riparian plantings is important. For example, intertidal areas in the lower watershed might be more suitable for mainstem tree planting projects, compared to the flashier, middle watershed.

Groundwater

- There is interested in investigating and updating historical WRIA planning and water allocations.
- More data on groundwater allocations and how water withdrawal influences temperature is desired, as well as increasing understanding of how low summer flows and low baseflows into fall, and reduced snowpack can influence temperature.
- Investigating potential illegal water withdrawals is a priority.
- Identifying any unused water rights that could be acquired and retired is a potential implementation action.

Funding

- It is challenging to identify private property owners that are willing to implement 100 foot buffers.
- Investigating other sources of funding, or partnership opportunities to support restoration, is critical to long-term success.
- Some tributaries aren't as high of a priority for Salmon Recovery funding, which can make it challenging to fund projects in tributaries.
- The Lower Columbia Fish Recovery Board has two new sources of funding that could be utilized to support projects in the East Fork Lewis River. Details related to this funding are forthcoming.

More information is needed to understand….

- How the width to depth ratio of the river influences temperature.
- How the east to west flow of the river and exposure to sunlight influences tributary temperature.
- How beavers and beaver dams influence temperature.
- The best places in the watershed to establish shade.
- The influence of the tide and dams on temperature.
- The location of farm ponds/man-made instream ponds and how these influence temperature,
- The location of warm shallow areas and the relationship between depth and temperature.
- How geomorphology affects restoration and if there are examples where geomorphology has been considered in TMDLs.
- How stormwater best management practices can help reduce watershed temperatures.
- Temperature in tributaries – specifically identifying shade deficits and understanding temperature dynamics in tributaries.