

Ashland Canal Piping Project

Ashland Canal Advisory Group Meeting

December 20, 2018

Opening 5:35pm

Purpose: seeking feedback and input. Displaying alternatives and seeking recommendations for Council in February.

Staff clarifies that feedback will be used in final proposal and recommendations of meeting attendees is for City staff information not a vote of final project proposal.

Introductions

Presentation begins.

Purpose: Improve water quality and conservations. Piping as priority.

Explanation of concerns: Next steps come from concerns.

Project work completed: Analysis of impacts.

- **Natural Resources:** Impacts on our natural resources. Seepage has created unnatural environment. Smaller trees, different species would be present.
 - SOU: Evaluation of wildlife impact. Canal does not function as a riparian corridor for wildlife. Half the season the canal is empty, and wildlife has found alternative water sources.
 - Fire: Piped line can be used as an improved fire break and allows better access to water if there were a fire in the area. Impact of piping minimal.

Pipeline could possibly have taps for watering of trees, would be in final design proposal.

Clarification from staff that the 300 trees are only in the immediate area. (10ft on either side of the canal) additional trees in surrounding area could be affected. Some variety of trees are more susceptible to die off, and those trees should be targeted for fire resilience.

Many trees are overly large due to canal which is an unnatural water source.

Additional trees can be expected to die due to a lack of water seepage past the easement.

It is difficult to be exact on the number of trees impacted.

Attendee question. How do trees in without water sources in the area survive?

- Generally due to natural water cycles. They don't grow bigger because they don't get the amount of water naturally that is supplied by the canal, so they do not go into crisis when the water is taken away.

Staff interjects that we have to remove the 285 trees because the root system extends under the canal construction will damage root systems causing the trees to die.

Attendee mentions a possible recommendation to property owners along the canal to assess if they die off, ultimately it is the land owner's decision on what they want to do for trees outside of the corridor that may be impacted by a cessation of water seepage.

Attendees would like to know if the proposed assessment will be a cost of the city or the home owner. The City has yet to decide but agree homeowners should be informed.

Currently City is nourishing trees without obligation, should that continue? No clear answer.

Water Quality: The water quality testing showed less E.coli, Have not determined where the E.coli dump is coming from. Original report started at Tolman creek.

Current State: Dan

Performed ranking of current liner. Ranking, Good medium and bad.

Water Loss/Seepage study: Performed using ponding method. Done in 48 hours, three different locations. Test sections length 100ft long. Aligned with high water mark 2.5cfs. 23% total water loss seepage over a season. Evaporation vs Seepage. Different methods for loss study, pond method, input output method.

With ponding it's difficult to determine the amount of water lost to the trees along corridor. Potentially there could be a larger amount of loss because of trees. Up to 30% total for water loss. Some canals can range from 15 to 48%. Around 2% of the water loss is from evaporation. 22% loss could be possibly negated by lining. Estimates are that we are losing enough water to fill immigrant reservoir from the whole system. Ponding is a lower estimate numerically.

(Pumping 47.54)

When drought and water loss occur trees have been assessed and culled to prevent die off.

Alternative Criteria: Flow rates, looking at historical flows, discussions with TID. 6 cfs is the maximum TID can deliver to the city. 1-3 alternatives require additional funding. Three alternatives:

- 1) Replace entire canal with pipe of one size, including currently piped sections, reduce E.coli (If shaded and cooled E.coli can't propagate), requires more excavation, and remove pollutants. (Smallest amount of material, excluding liner).
- 2) Replace open canal with pipe and rehab existing pipes (requiring new pipes to be larger). Reduce E.coli, max resources, more expensive, requires a little less tree removal. (damages landscape, possible structural impact, and all associate landscapes with it).
- 3) Rehab Existing concrete liner with similar and add membrane to existing piped sections, won't last as long as other options, will need to be replaced, it does not address water quality, will help seepage and tree removal as previous. Plastic liner, unreinforced. Currently unproven in industry. 60 year estimated life span for concrete. (possibly least intrusive to people who have preexisting pipe but not for people who do not currently have piping.)

- 4) Do nothing. Still E.coli, water loss remains the same. Tree maintenance, trees will continue to get bigger, roots will expand and continue to deteriorate the current system and will make loss greater over time.

Total project costs include fences, driveways and any repairs.

Sediment is handled in the pipe, the flow is high and keeps pipe flushed, with sumps for manual cleaning close to streets. Hard to say how often, depending on the sediment level. Less sediment entering the creek and in the canal in general. Syphons can also be used (a low spot in the canal) to catch sediment.

Staff explains that if we curtail the 23% seepage, continuing to pay TID water, with lack of seepage we will recoup cost and apply throughout the city, making more available to get TID water, less water going through the treatment plant. Theoretically, traveling bar screen.

Grant Opportunities: Natural Resources Conservation Service

Oregon Watershed Enhanced

Motion for Support of Option and Seconded

Haven't talked about public access, people using the canal as is, public currently doesn't not have access for most. Usable space, would need to be regulated and easement upheld. Typical easement states no trees. The City has currently not keep up on maintaining easement.

This project will create opportunities for additional easements.

Priority ranking. Each person gets three stickers, for ranking on priorities.

Reactions to Priority list: Efficiency is #1 and Quality is #2.

Addition to 1, additional information to homeowners to help them take care of the trees when seepage is gone. A strategy and plan for homeowners. Without the city taking responsibility for trees on private property. Education to homeowners rather than the City taking responsibility.

Quite a lot of cost associated with felling and clearing dead trees. Including property value loss. Suggestion that it is named and recognized.

City could be involved via setting up a fund to help property owners whose trees are affected.

Three things during process of construction

- 1) Professional consultation, each property the land owners a pointed out what trees are most at risk.
- 2) Help after piping.
- 3) Measures to prevent tree death.
- 4) During initial construction process, City could remove at risk trees on private property.

Trees could be weaned of the water source gradually.

Final recommendation Vote.

Alternative 1) 7 for 1st choice. 2 for 2nd choice

Alternative 2) 4 for 2nd Choice

Alternative 3) 1 2nd Choice

Alternative 4) 3 1st Choice.

Notes taken by:

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