Lagoon Repurpose Frequently Asked Questions

CURRENT LAGOON

Isn't the lagoon needed to treat wastewater for St. Helens?

The City's wastewater treatment lagoon on Plymouth Street is much larger than needed for current and expected future wastewater volumes. The site is sized for 40 million gallons a day and the city currently only processes three million on a typical day. There are volume spikes during storm events.

Other sites, not at the waterfront, would be more suited for development and could be built to handle current needs and forecasted population growth.

What is contained in the current lagoon?

The lagoon was developed to treat wastewater from the city and the Boise White Paper pulp and paper plant. It remains in operation, treating the city's wastewater and that from Cascades Paper Production, located at the former Boise White Paper site. Sludge is a byproduct of the treatment process and is periodically removed. The sludge and water is tested and treated according to environmental quality standards and is handled with appropriate safety measures.

If the lagoon is filled, the sludge would be encapsulated along with the added sediment and then fully confined and covered.

Why would others be interested in sending sediment to the lagoon site?

Dredged sediments come from ports, private docks and marinas, houseboat communities, and commercial and industrial waterfront properties. There is unmet demand for safe and cost-effective places to safely dispose of these sediments.

There are many reasons why the wastewater lagoon is well suited for a disposal site, including:

- 1) its location within stable rock, which provides a solid foundation, even in the event of an earthquake.
- 2) its river and rail access, which would allow dredged sediments to be economically transported to the facility.
- 3) its central location relative to expected users.

SEDIMENT, FILL AND TERMINOLOGY

What is sediment?

Sediment is a naturally occurring material broken down by processes of weathering and erosion. When dredged from riverways, sediment generally consists of sands and silts.

Why does sediment need to be moved from one place to another?

Dredged sediments come from ports, private docks and marinas, houseboat communities, and commercial and industrial waterfront properties. Once the material is dredged, it must be placed

somewhere – in some cases, sediment is placed in open water. In others, it is barged or sent via truck or rail to an appropriate disposal site.

What kind of sediments would go in a disposal site in St. Helens?

The lagoon would be filled with naturally occurring sediments dredged from riverways and generally consisting of sand and silt. Soil from upland sources could also be placed in the site.

What's in the sediment that the City is expecting to receive? Are the sediments and soil that would be used as fill toxic?

Hazardous waste will not be placed in this facility.

Sediment throughout the Willamette and Columbia rivers commonly contains low levels of metals like lead, zinc, cadmium, and chromium; oil and grease; and industrial chemicals that were banned in the 1970s. The sediments and soils that would be used at the lagoon site are safe when placed in a confined facility, outside of the waterways, and where people and animals won't come into direct contact with it.

Are sediments from the Portland Harbor coming here?

The lagoon repository is intended to be a regional alternative to in-water disposal of non-hazardous sediment dredged from the navigation channels, and a more sustainable alternative than trucking millions of tons of sediment to existing disposal sites in Eastern Oregon. If the regulatory agencies approve, the lagoon will be ready to receive Portland Harbor sediment that is permitted by DEQ. None of the hazardous sediment (which is a small portion of the total sediment to be dredged according to EPA) will be allowed in the lagoon repository.

ENVIRONMENT, HEALTH AND SAFETY

Will the fill sediments smell? What about air emissions?

Sediments are dredged from riverways and generally consist of sands and silts. The organic content, which can cause odors, is expected to be minimal. This is also true for the soils from cleanup sites. The DEQ permit will stipulate that sediments may not contain contaminants that would volatilize into the atmosphere in large amounts.

Will there be a risk to the neighbors in St. Helens if the lagoon repository accepts sediment from Portland Harbor?

We don't anticipate risk from sediment placed in the lagoon as it will be well-contained and covered.

Would the site be safe during earthquakes and floods?

The DEQ solid waste facility permitting process is based on federal regulations and guidelines and is structured to ensure that the facility is well-designed and will not have adverse impacts to human health or the environment. All necessary factors are taken into consideration, including groundwater and surface water protection, seismic stability, protection against flooding, and worker and neighborhood protection.

Will site construction or operations be noisy?

No more so than industrial uses nearby. The permit from DEQ will also stipulate working hours and allowable noise levels.

How is long-term facility integrity ensured?

DEQ solid waste regulations require "financial assurance," which means that the City will set aside funds to close the site and monitor it for 30 years. Funds for maintenance and repair are included in this set-aside. Before the end of the 30-year period, DEQ will work with the City to set ongoing requirements and financial assurance based on specific site conditions and needs.

COSTS AND REVENUE

Would filling the lagoon with dredged sediments and soil from cleanups cover the cost of filling the lagoon?

Yes, with significant revenue left over; early projections show that the City will receive in the neighborhood of \$95 million dollars after all expenses are accounted for.

How would that money be used?

That is for the City, with input from residents, to decide. Some of the money would likely be used to upgrade or replace the wastewater treatment plant. The monies could potentially be used to build parks, beaches, open spaces, a boat dock, an amphitheater or other amenities that are desired by residents.

TIMFLINE AND PROCESS

Would the waste water treatment facility need to be relocated? Where would it go?

At this point, it is too early to know if the treatment facility would be relocated, but if it is moved, a likely site would be within the former Boise White Paper site, which is now owned by the City. The City is beginning a process to evaluate specific location options for the waste water treatment facility. This information will be shared and discussed with the public as it is developed. A decision will be made about whether to relocate the facility once options are evaluated and more information is known about development of the central waterfront and the lagoon site.

What happens when the lagoon is full?

Closure will follow federal and state regulations and procedures. First, the facility will be closed with a DEQ-approved material designed to prevent rainwater infiltration (membrane liner) and covered with clean soil. After that it can be safely converted to another use. The location, near the water, makes it ideal for public access and open space. Parks, beaches, open spaces, a boat dock, an amphitheater or other amenities that are desired by the community are all possibilities. The City will gather significant public input as part of the "visioning" process for the highest and best reuse of the site.

Can you build structures on top of the filled lagoon? What are the limitations for future development, if any?

Generally, with proper preparation of the soil and sediment placed in the landfill, the City can build a wide variety of structures, including multi-story buildings. Limitations, if any, will be established as the material is brought in and tested. At this point we do not anticipate being constrained in terms of building height or mass.

Will I have an opportunity to voice my opinion about this idea?

Yes. The city will gather public input during the "visioning" process for the highest and best reuse of the site, as well as potential locations for the new wastewater treatment facility. The City plans to hold one or more public meetings to gather citizen input.

The DEQ permitting process will also include community outreach, meetings and a public hearing.

For more information, contact City Administrator John Walsh at jwalsh@ci.st-helens.or.us or 503-366-8211.