

Steigerwald Habitat Restoration and Flood Control Project Steigerwald Wellfield Development

Camas City Council Worksession – March 21, 2016

Presented to Washougal Council on March 14, 2016



Discussion Items

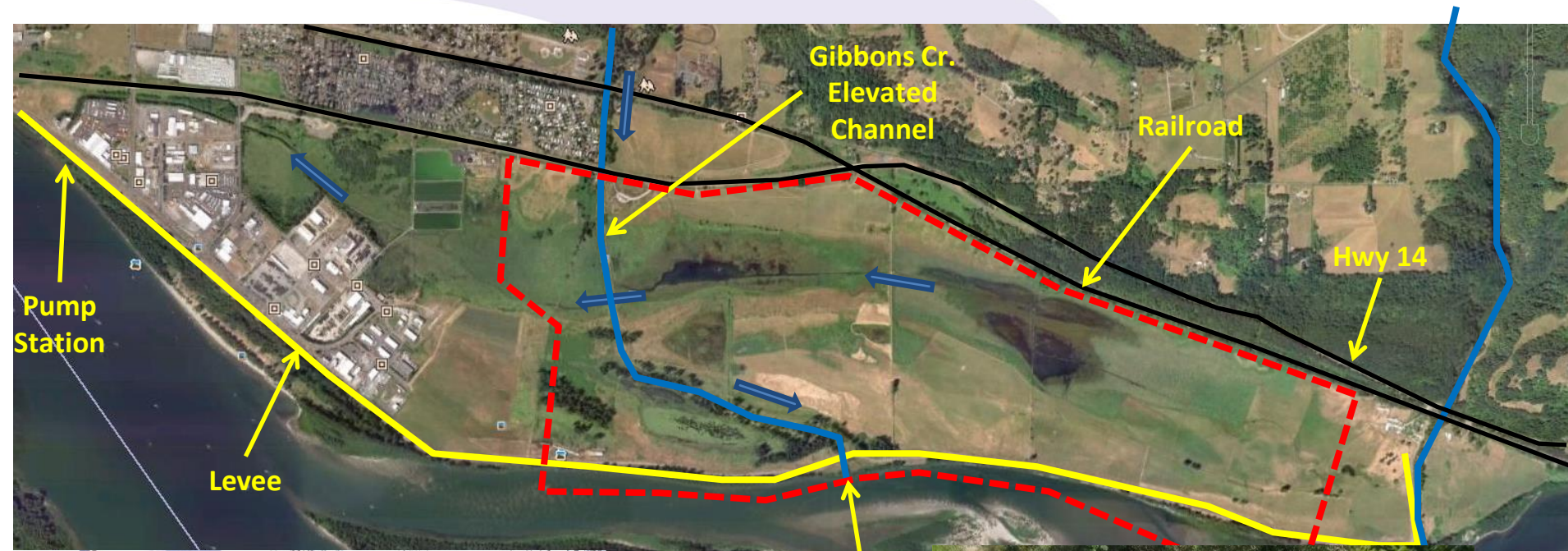
- Project Partners
- Restoration Project Overview and Timing
- Well-field Project Overview and Timing
- Restoration Project Impacts to Well-field Project
- Project Coordination and Pre-Planning
 - Supplemental Professional Services Agreement:
Murray, Smith and Associates
- Next Steps
- Council Questions/Discussion



Restoration Partners

- Lower Columbia Estuary Partnership (Project Co-lead)
- Port of C-W (Project Co-lead)
- Bonneville Power Administration (Project funder)
- ESA Associates (Consultant)
- U.S. Fish and Wildlife Service (primary landowner)
- U.S. Army Corps of Engineers (regulatory review)
- Cities of Washougal and Camas
 - City of Washougal owns well-field property in the affected area of the restoration project (City of Camas partnership “owner”)
 - City of Washougal must grant an easement for proposed set-back levee with concurrence from City of Camas

Existing Conditions



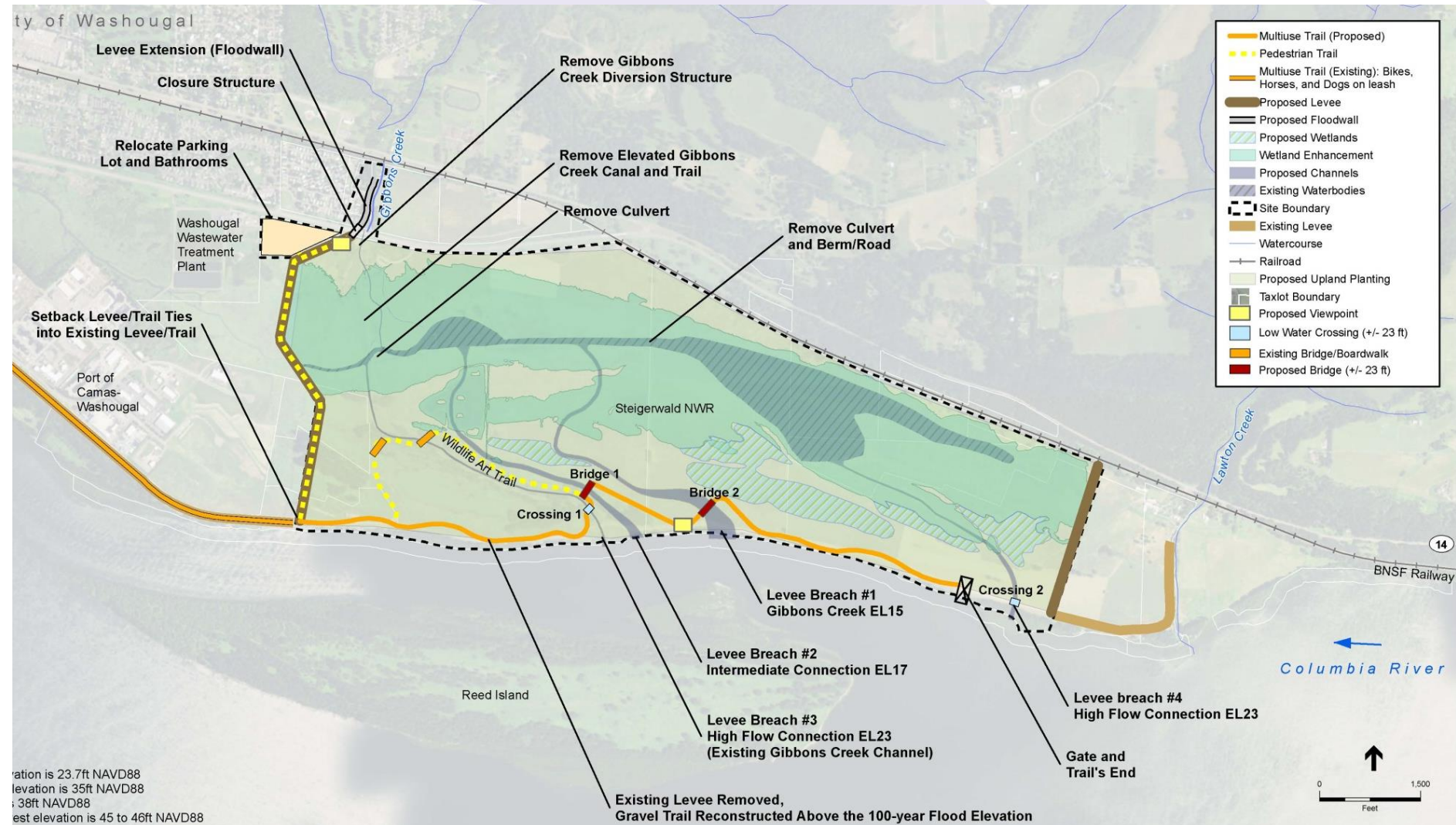
Creek
Google
alt 21351 ft

Restoration Project Overview and Timing

- Port, USFWS, LCEP and BPA are planning to build two new setback levees and remove two miles of the existing levee along the Columbia River adjacent to the Steigerwald Refuge.
- Project would restore Gibbons Creek to its original alignment and reconnect the Refuge to the Columbia River.
- Habitat restoration is required to mitigate for Columbia River dams and their impact on salmon. BPA funds the project and receives credit.
- Project currently at 30% design. Construction scheduled for 2018/2019.



Proposed Restoration Concept Plan



elevation is 23.7ft NAVD88
 elevation is 35ft NAVD88
 elevation is 38ft NAVD88
 elevation is 45 to 46ft NAVD88

Proposed Restoration Concept Plan



Fish Ladder

Levee

Elevated Channel

Parking

Flood Wall

Project Benefits

1. Environmental:

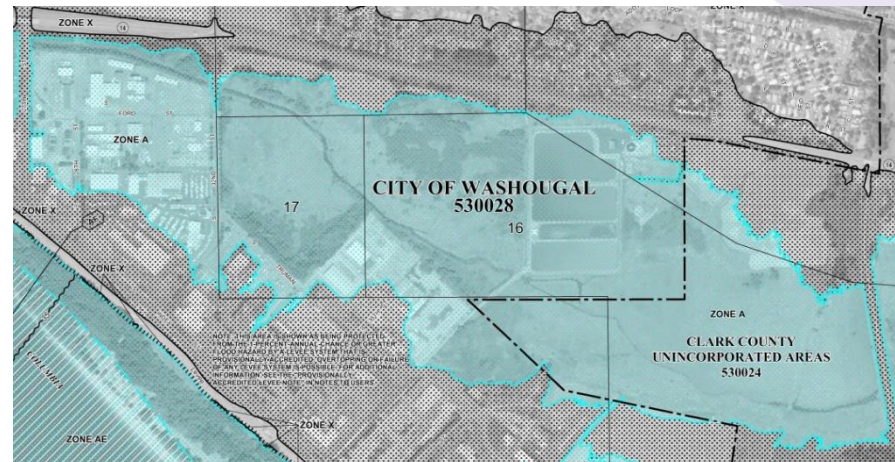
- Improved habitat conditions for salmon and waterfowl
- Eliminates dredging of Gibbons Creek
- Helps BPA meet their federal mitigation obligations

2. Economic:

- ~\$15-20M construction contract
- Reduced flood risk to Highway 14
- Removes all City of Washougal & Port infrastructure from the flood zone
- Reduces O&M costs for the Port by up to \$100,000 annually
- Regional media coverage (largest restoration project in the Portland/Vancouver area)

3. Recreation:

- Re-design recreation infrastructure at a highly utilized urban refuge
- Opportunity for local students and public to learn about habitat restoration and flood control



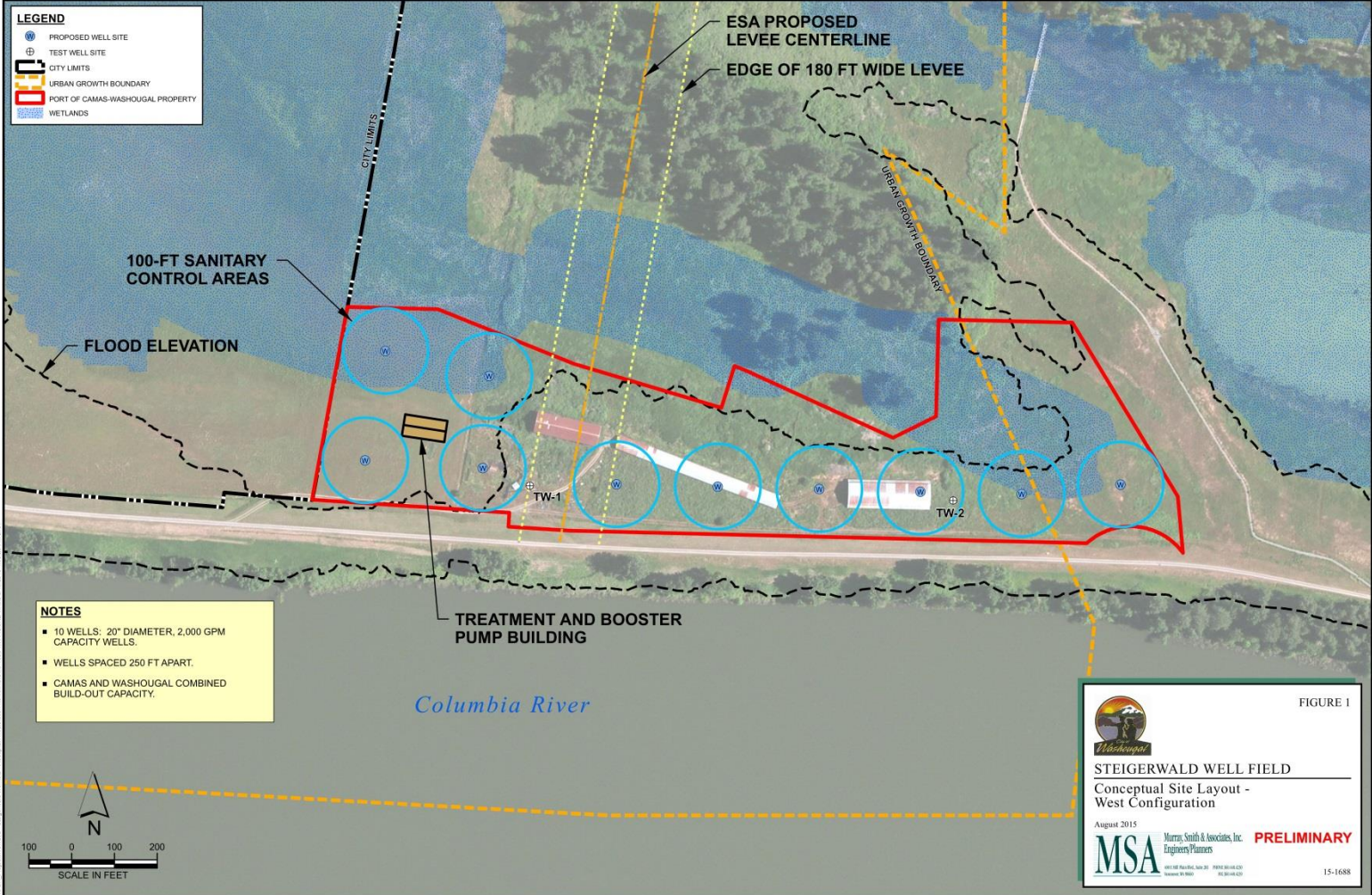
Wellfield Project

- City of Washougal (property owner) and Camas (partner) are in partnership for future well-field property recently purchased from the Port of C-W
- The property purchased has been identified by the Water Resources Inventory Area (WRIA) 27/28 as the only location where new groundwater withdraws will be approved in this area over the next 50 years
- WRIA 27/28 approval process included Departments of Health and Ecology and other state agencies for co-locating regional groundwater sources in Clark County
- Well-field development approximately 10 years out

Restoration Project Impacts on Wellfield Project

- Under current conditions the entire wellfield site is protected by the existing levee
- The new set-back levee at the western end of the proposed restoration project will maintain levee protection for the western portion of the well-field
- The remaining wellheads in the eastern portion of the well-field will be in the restored floodplain
- On-going discussions between project partners re: mitigating the impact of the restoration project on the well-field project

Steigerwald Wellfield Layout



Restoration Project Impacts on Wellfield Project

Several issues regarding developing the wellfield have been brought to the project partners and need further refinement prior to the plans being finalized and cities granting an easement for the levee construction.

- 1) Surety that the wells on the east side of the levee will be allowed to be permitted for development in the future
- 2) Surety that piping for water, electrical, and any other well needs will be constructed with the levee project
- 3) Surety that grading will be completed with restoration project for wells and access roads to be placed above the 500 year flood elevation
- 4) Surety that well house structures, well house casings, generators and site lighting will be allowed in the future

Project Coordination and Pre-Planning

MSA Scope of Services - \$ 30,597 (cost shared with Camas 60%/Washougal 40%)

- Coordinate with ESA, Port and Estuary Partnership on assured permitting plan for cities to allow wellfield development in the future including impacts to levee
- Elevate wellheads in restoration area above 500 year floodplain to allow for streamlined permitting
- Size well field pads and access roads to minimize construction issues when wells are developed
- Coordinate with consultant for conduits over levee for well operation on the east side of the levee

Next Steps

- City of Washougal contracts with MSA to complete pre-planning efforts and ensure continued use of wellfield site
- Project coordination and pre-planning continues
- Mitigation for impacts to well-field detailed in regulatory analysis and 60% design set
- Future Council Work Session to provide project updates
- Washougal grants easement with Camas concurrence
- Restoration Project construction commences
 - (including well-field pre-work)