

Steigerwald Reconnection Project



Scaling Up to Implement Complex, High-Risk, Climate-Resilient Floodplain Restoration

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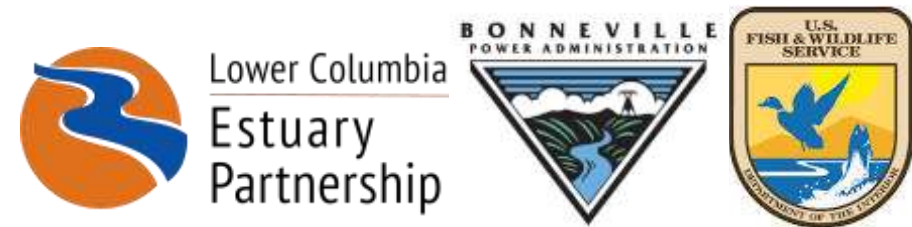


Overview of Presentation

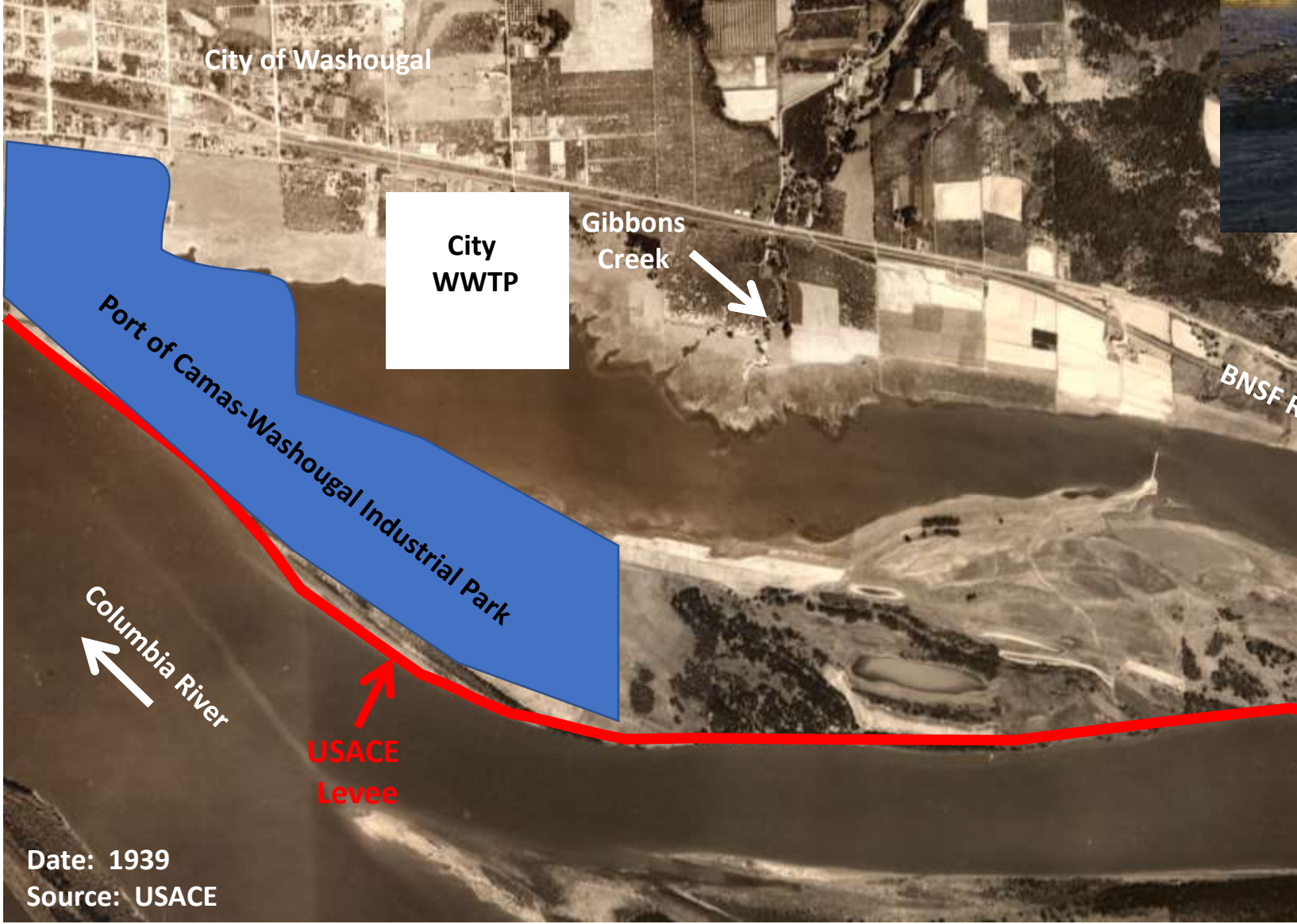
- (Very) brief project overview
- Lessons learned
 - Building support
 - Development
 - Implementation
- Concluding thoughts
- Questions

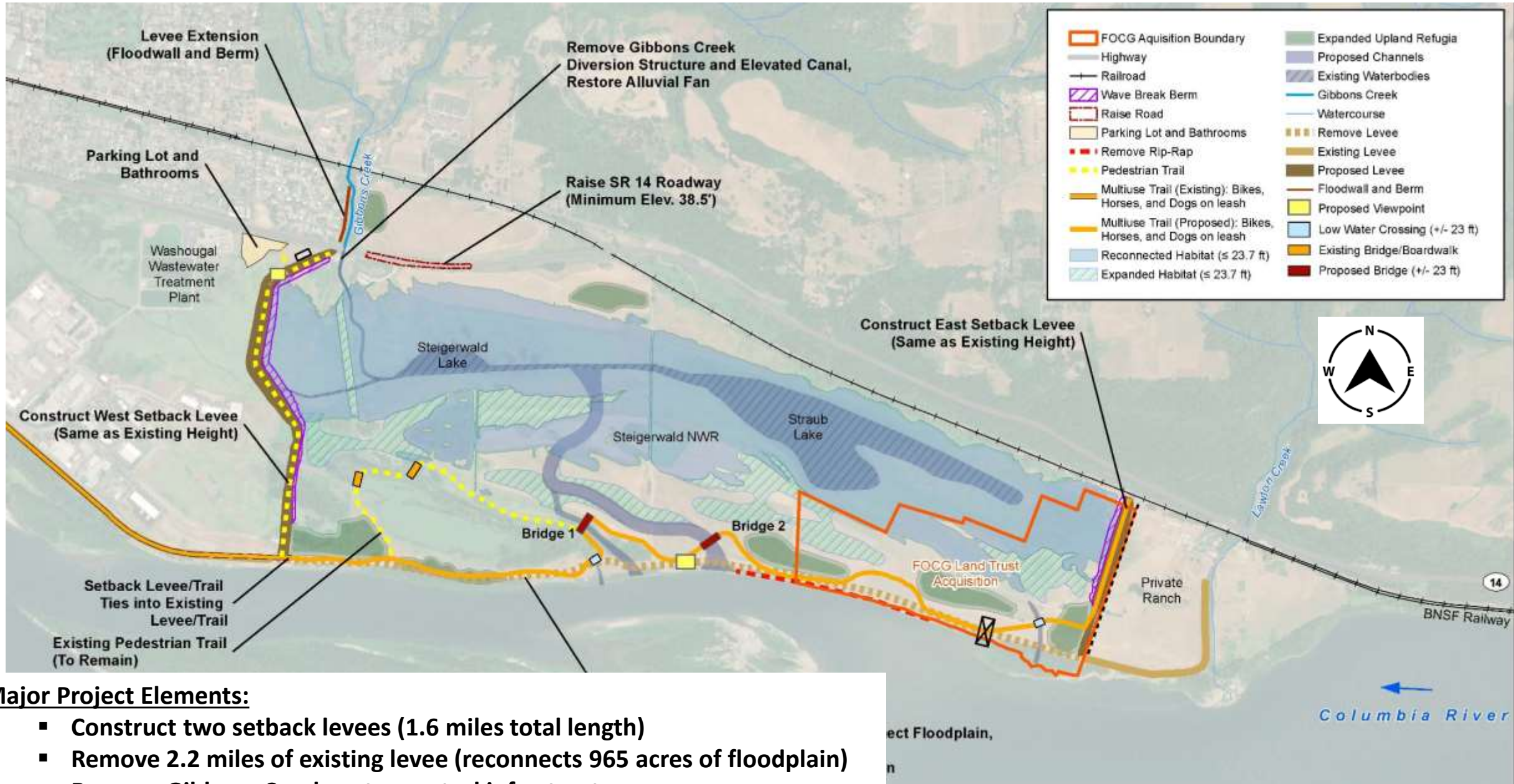


West Setback Levee



Historic Conditions & Limiting Factors





Major Project Elements:

- Construct two setback levees (1.6 miles total length)
- Remove 2.2 miles of existing levee (reconnects 965 acres of floodplain)
- Remove Gibbons Creek water control infrastructure
- Raise 1,300 linear feet of State Route 14
- Reforest 250 acres of native riparian habitat (635,000 plants)

First Flood Event!



East setback levee

Gibbons Creek

West setback levee

New parking lot

Why is Steigerwald a Good Case Study?

1. Ten year effort
2. Ten landowners
3. Eleven real estate acquisitions
4. Regulatory complexities
5. Carbon footprint
 - ✓ Adaptation
 - Mitigation
 - ✓ Sequestration
6. Schedule risk:
 - 1.7M cubic yards of earth
 - Overlapping work windows
 - WDFW
 - USACE
 - WSDOT
 - BNSF RR
 - USFWS



Purpose of this talk...

1. *How do we avoid stakeholders telling us “that project will never happen”?*
2. *Once we get to “yes”, how do we successfully develop and implement these large, high-risk projects?*



Planning/Feasibility Phase – “that project will never happen”

1. Develop a risk management strategy.

- Fatal Flaws Analysis
 - Cost/benefit
 - Regulatory hurdles (408)
- ***Limit stranded investment!***



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2. External Affairs:

- Shine a spotlight on the project.
 - Engage the press.
 - Give presentations.
 - Write Op-Eds.
- Engage politicians.
- ***Make it hard for anyone to say “no”!***



Design Phase – *how do we develop the project?*

Climate mitigation – focus on reducing the project's CO² emissions.

How: 1. Focus stakeholder conversations on emissions, not cost.



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- How:
1. Focus stakeholder conversations on emissions, not cost.
 2. Rebuild infrastructure to meet current levels of risk.



West Setback Levee



State
Route 14

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Climate mitigation – focus on reducing the project’s CO² emissions.

- How:
1. Focus stakeholder conversations on emissions, not cost.
 2. Rebuild infrastructure to meet current levels of risk.
 3. Less wood, more willows and BDAs.



Construction Phase – *how do we implement the project?*

1. Procurement sets the project up for success!
 - Pre-qualify bidders
 - Detailed site visits and information
 - Diverse selection/review team
2. Large projects with quantity-based pay items are tricky.
 - Hire a professional CM team.
 - Robust contingency (>10%) to account for uncertainty.



Mandatory Pre-bid Site Visit

Concluding Thought #1 – *Expect Some Type 3 Fun*

Type I Fun

Enjoyable while it's happening.



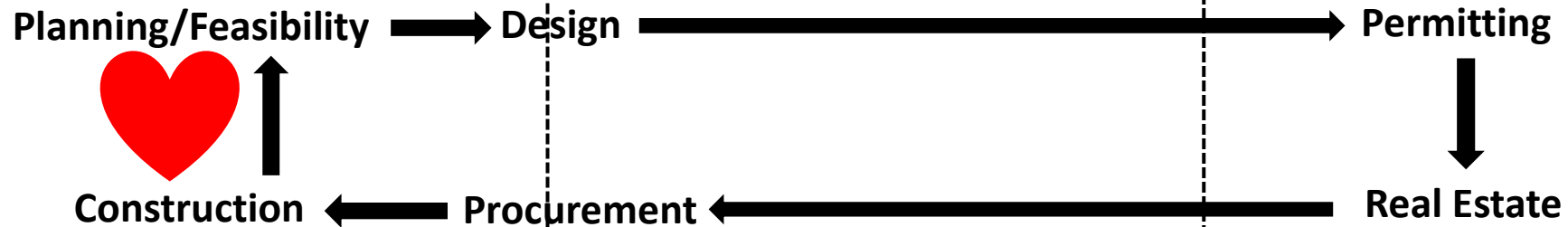
Type II Fun

Miserable at the time;
enjoyable only in retrospect.



Type III Fun

Never enjoyable;
miserable at all times.



Concluding Thought #2 – *It Takes an Integrated, Highly Functioning Team with a Common Goal*

Funders:



Key Partners:



A Little Help from a Friend

Concluding Thought #2 – *It Takes an Integrated, Highly Functioning Team with a Common Goal*

Design/CM Team:



EP Staff:



Contractors:



Summary

- Aggressively manage **risk**.
- **Talk up your project** every chance you get!
- **Procurement** and professional **construction management** are critical.
- Expect a healthy(??) dose of **Type III fun**.
- Build a **great team** and let them do their job.



Lessons Learned – *Design Phase (how do we develop the project?)*

Climate mitigation – focus on the project's emissions footprint.

Step 2: Sequester CO² emissions....



Lessons Learned – *Regulatory Phase (how do we develop the project?)*

Focus on schedule flexibility.

- Examples:
- 1) Corps allowed us to deconstruct existing levee prior to completing setback levees.
 - 2) WDFW granted an extended in-water window. June 1 – Oct 15!

