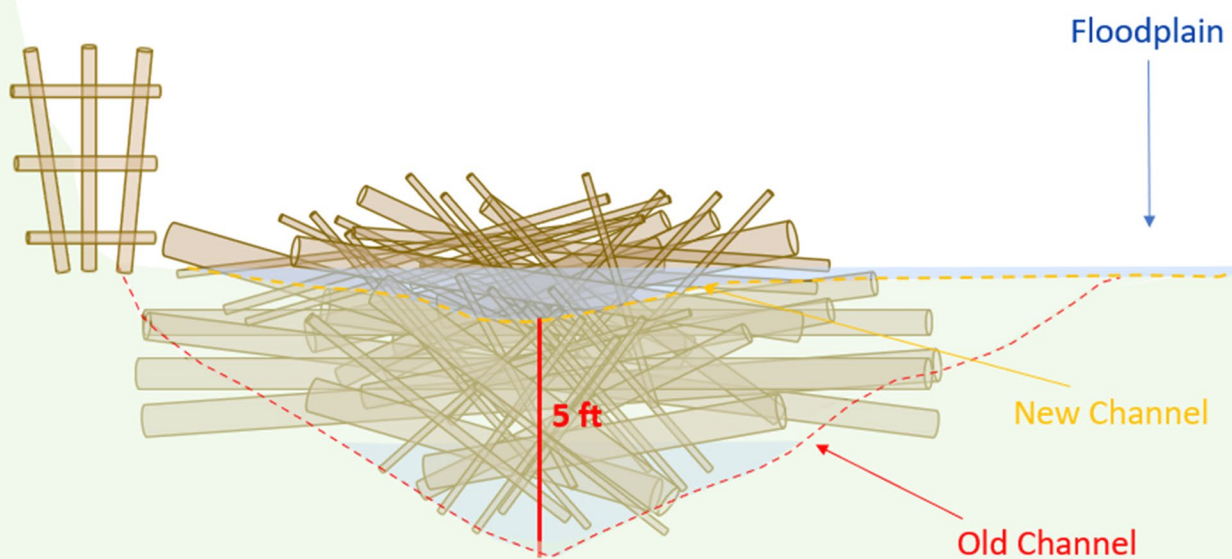


# Surface volume changes for landslide areas between 2003 and 2020 in Dead Horse Canyon.



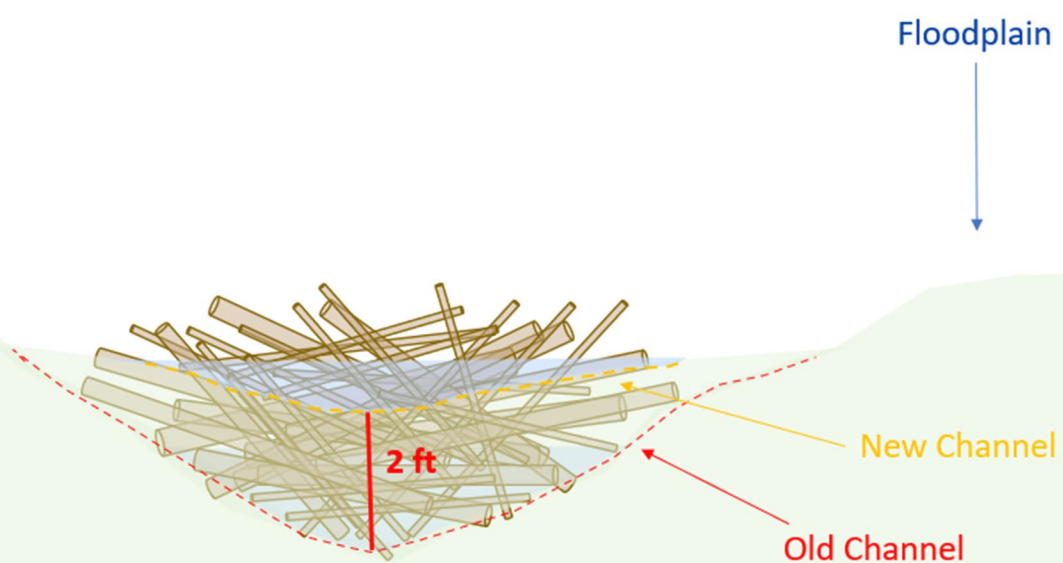
## Machine Placed LWM

1. Builds up channel 5 ft
2. Reduces channel bank erosion
3. Timber frames support banks, reduce end running, supports re-vegetation
4. Connects to floodplain
5. "One and Done"



## Hand Placed LWM

1. Builds up channel ~2 ft
2. ~~Reduces channel bank erosion~~
3. Timber frame size and configuration?
4. ~~Connects to floodplain~~
5. Requires ongoing structure installations to continue to retain some sediment



## Large Woody Material -

what do we need it to do?

- Stay in place
- Capture sediment/prevent transport and deposition downstream
- Be large enough and capture enough sediment to get to target elevation
  - Connect channel with floodplain
  - Reduce erosional processes at banks





## Regional investment in salmon recovery

Lake WA shorelines are a Tier 1 priority for the region. Salmon recovery plans have highlighted the need to reconnect and enhance creek mouths and restore shallow water rearing and refuge habitat for endangered chinook salmon – this is one of the many goals of this project.

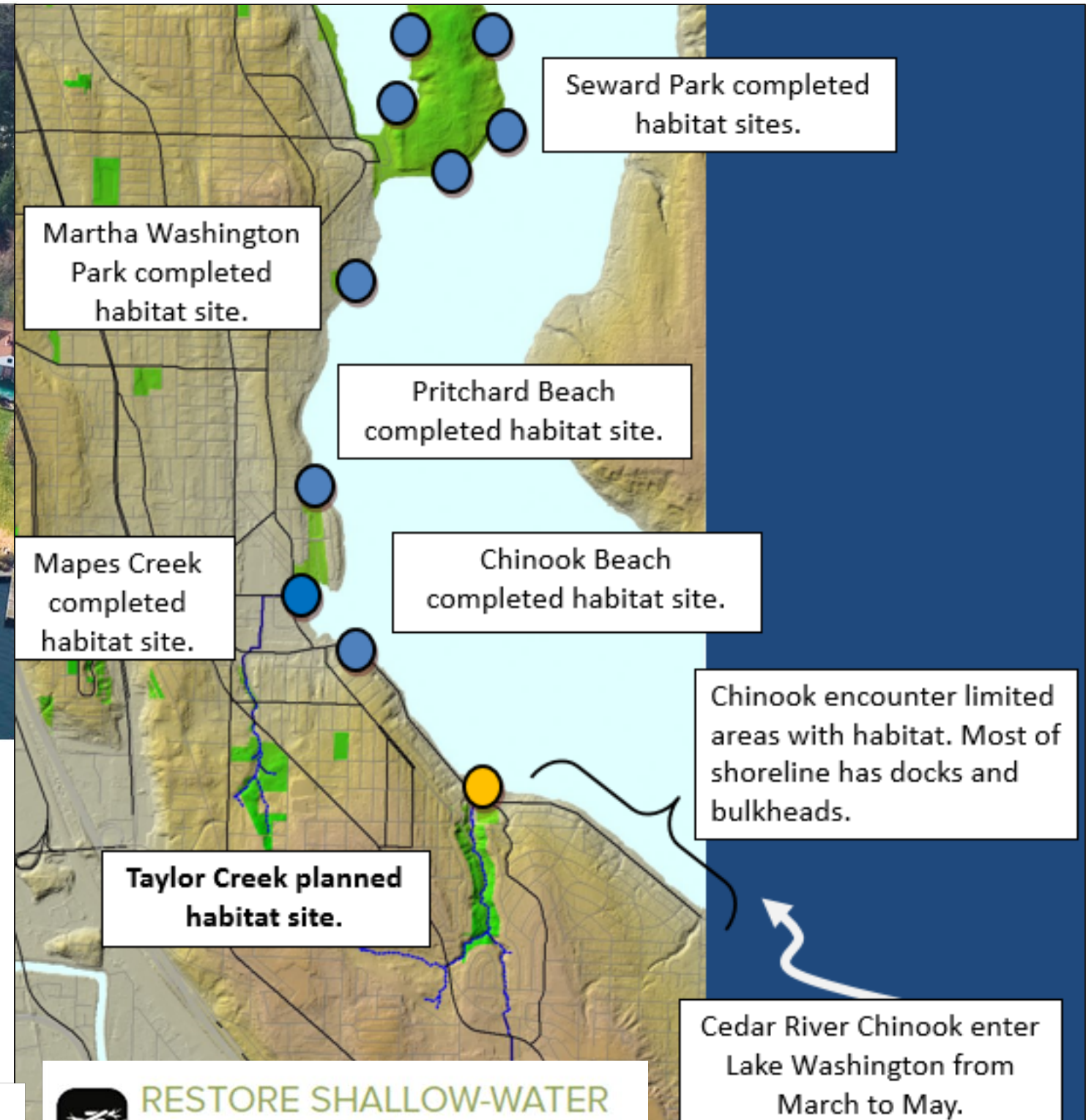
WRIA 8 SALMON  
RECOVERY STRATEGIES



RECONNECT AND ENHANCE  
CREEK MOUTHS

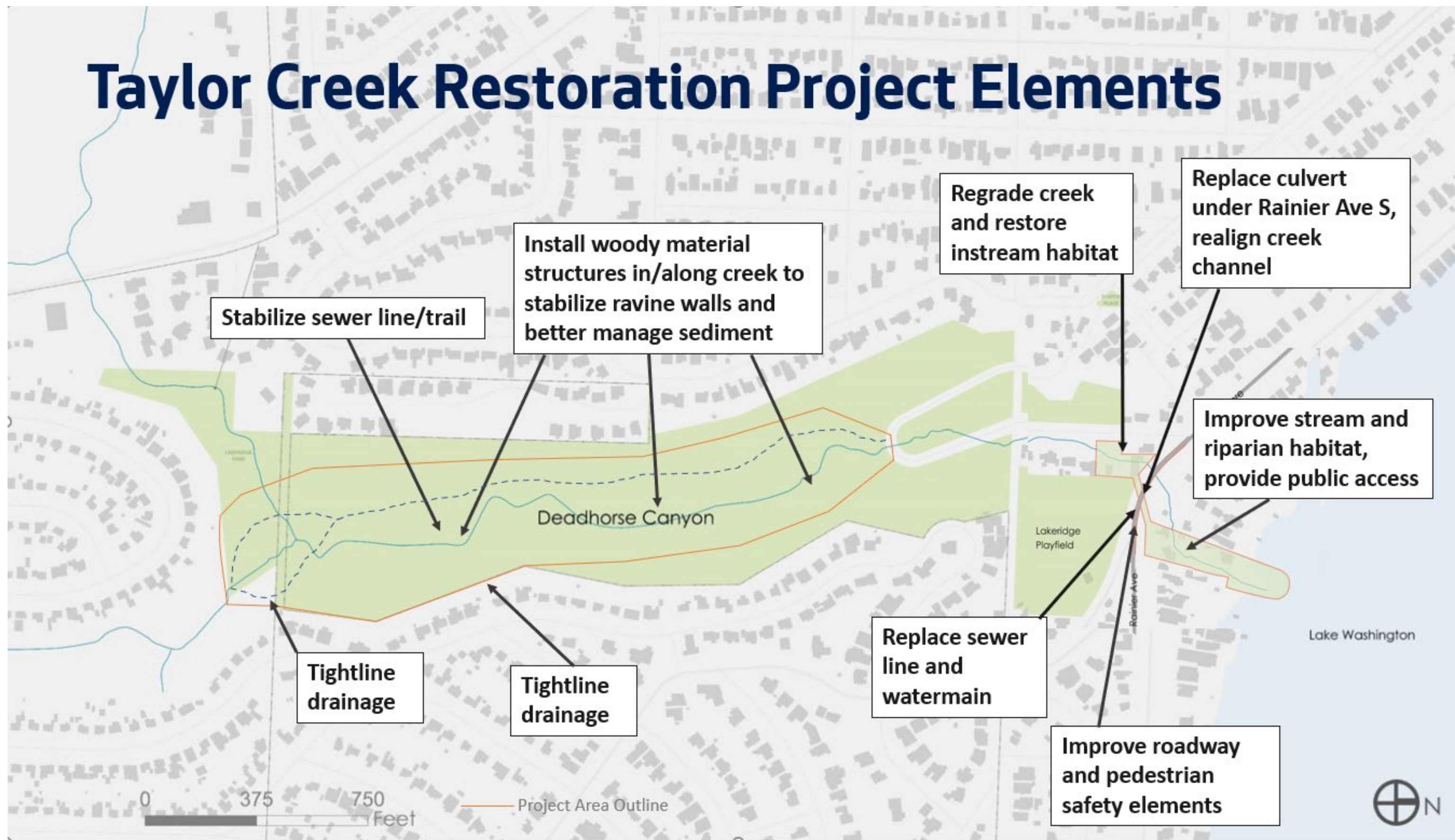


RESTORE SHALLOW-WATER  
REARING AND REFUGE  
HABITAT





# Taylor Creek Restoration Project Elements





# Current Culvert Conditions



## New Culvert / Bridge

Culvert under roadway, example from Thornton Creek Improvement



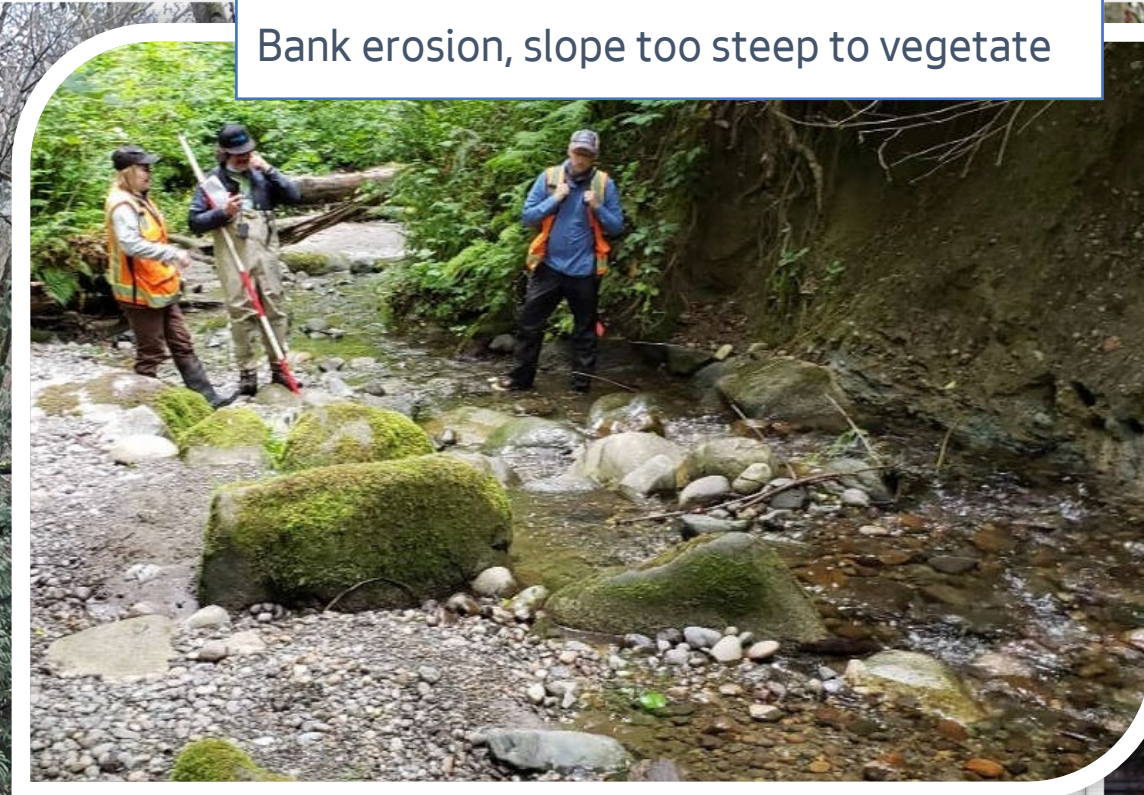
## Street improvements







Bank erosion - toe of slope



Bank erosion, slope too steep to vegetate



Gully, slope and bank erosion







**Reduce  
input**

**Tightline  
outfall**

**Streambank  
stabilization &  
revegetation**

## Streambank stabilization & revegetation



King County owned drainage outfall



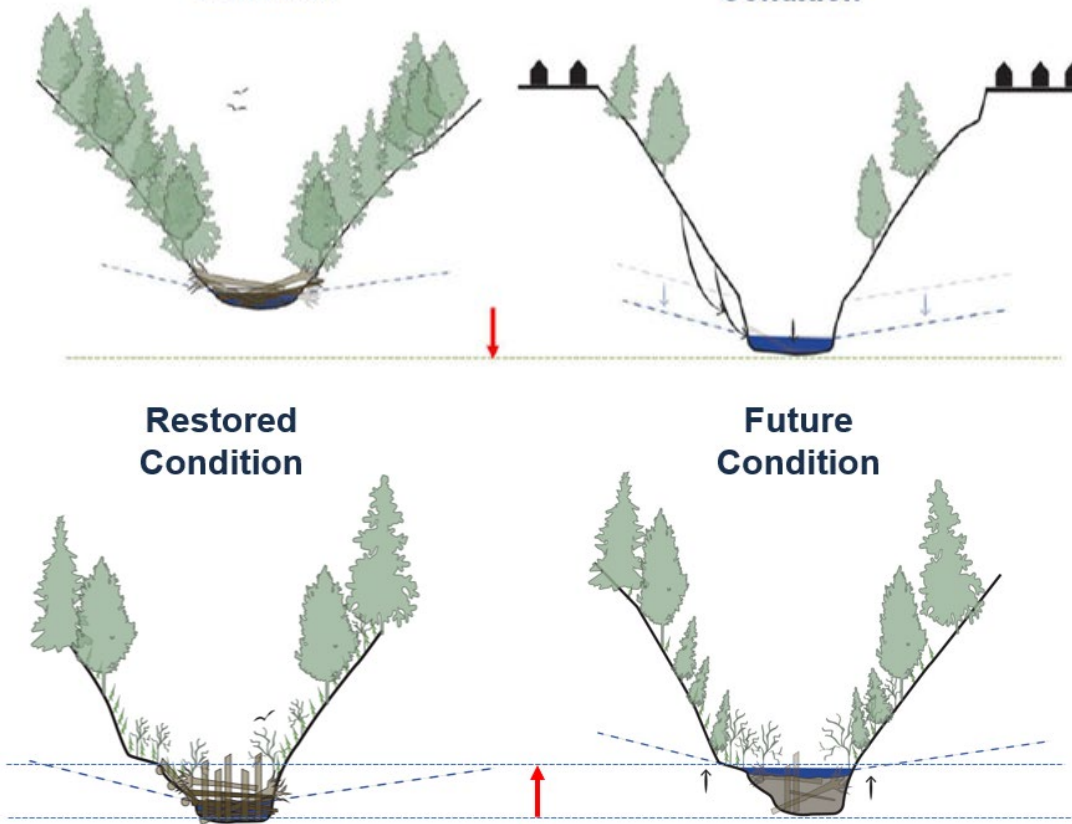
Example of a tightlined outfall

**Storage in canyon**

**Large wood**

**Streambank stabilization & revegetation**

## Streambank stabilization & revegetation

A grey circle with the text "Floodplain storage" in white.

**Increasing  
natural  
floodplain**

**Expanded  
future  
floodplain**

**Expanded  
future  
floodplain**

An aerial photograph of the Lakeridge Playfield area. A yellow rectangular box highlights a specific site, which is shown in a larger, detailed inset map. The inset map displays a green field with various colored lines and markers, likely representing different zones or features. To the right of the inset, the text "Rainier Ave S" is written in a stylized font. Below that, "Lakeridge Playfield" is written in a bold, sans-serif font. At the bottom right, there is a north arrow pointing upwards, labeled with a large "N".

An aerial photograph of the Lakeridge Playfield area. A yellow rectangular box highlights a specific site, which is shown in a larger, detailed inset map. The inset map displays a green field with various colored lines and markers, likely representing different zones or features. To the right of the inset, the text "Rainier Ave S" is written in a stylized font. Below that, "Lakeridge Playfield" is written in a bold, sans-serif font. At the bottom right, there is a north arrow pointing upwards, labeled with a large "N".

Rainier Ave S

Lakeridge Playfield

N

Rainier Ave S

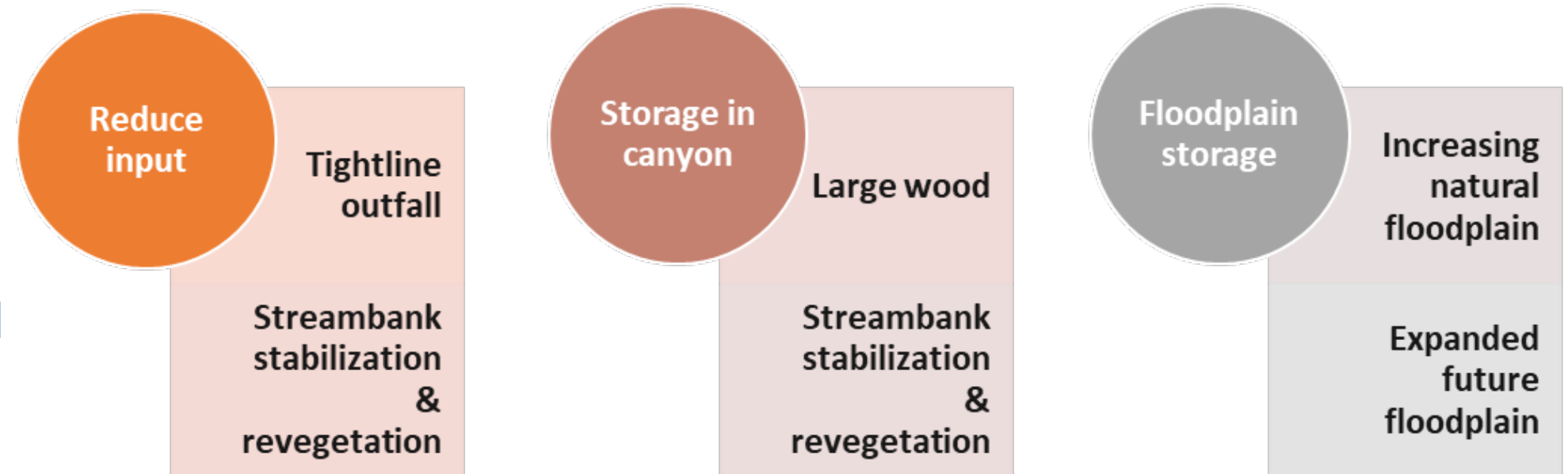
Lakeridge Playfield

N

# Sediment Management Strategy

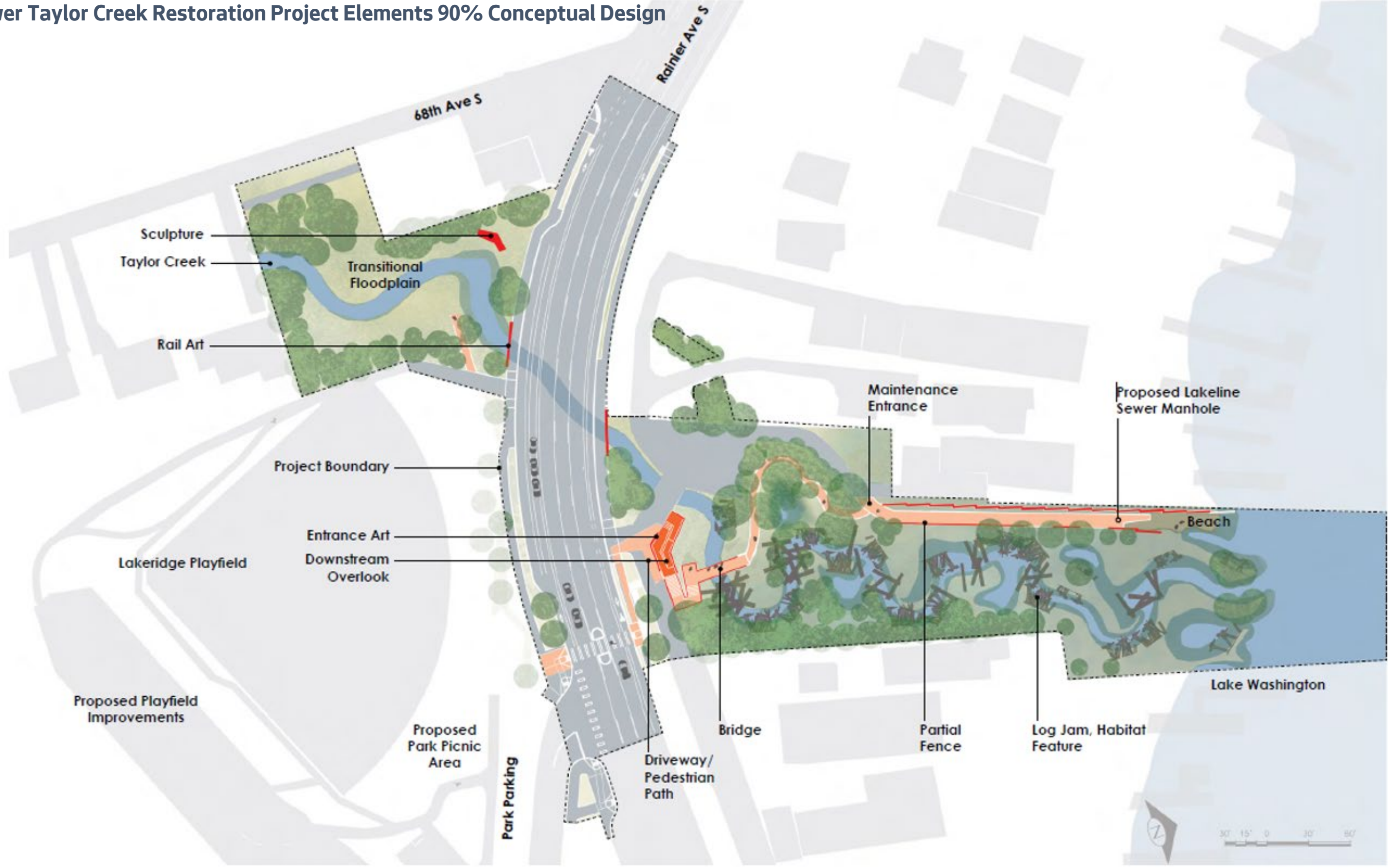
## *Repair, rebuild and reconnect*

- Protect investment in salmon recovery
- Prevent sediment build-up in the culverts
- Reduce/eliminate need for repeated interventions in the creek
- Reduce flooding risk to houses below the canyon

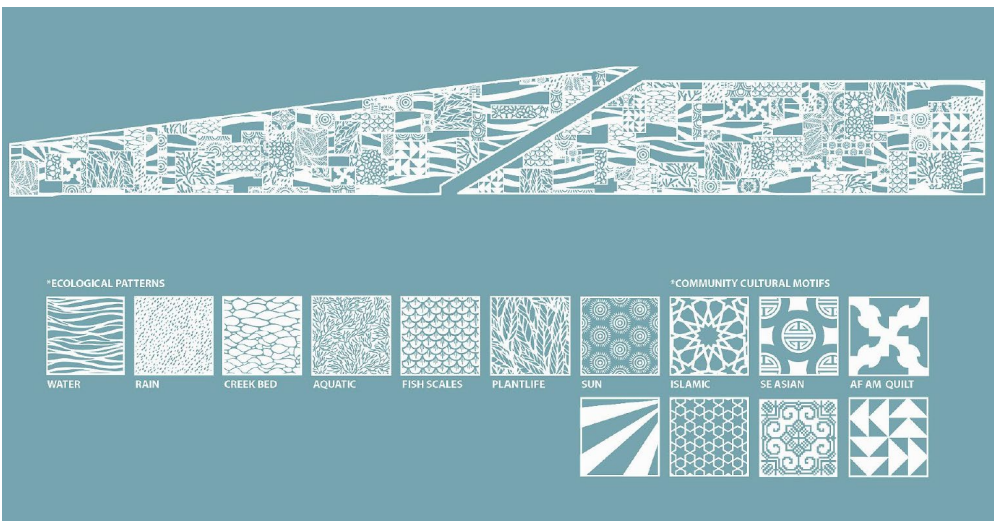
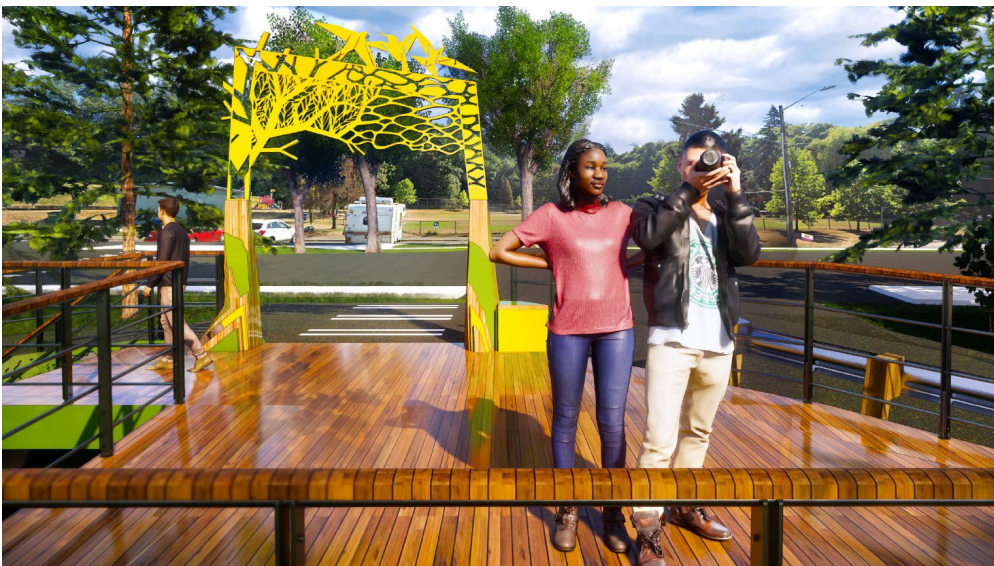




Lower Taylor Creek Restoration Project Elements 90% Conceptual Design







# Taylor Creek Restoration Project Draft Art Renderings

