

Sammamish River Tributaries Habitat Survey

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Sammamish River Tributaries Habitat Survey Objectives

- Inventory instream and riparian habitat types along any 15 of 27 miles of the minor tributaries to the Sammamish River to:
 - Expand existing stream and habitat conditions database established by King County WLR
 - Facilitate development of basin-wide approaches to restoration (within GI study)

Sammamish River Tributaries Habitat Survey Methods

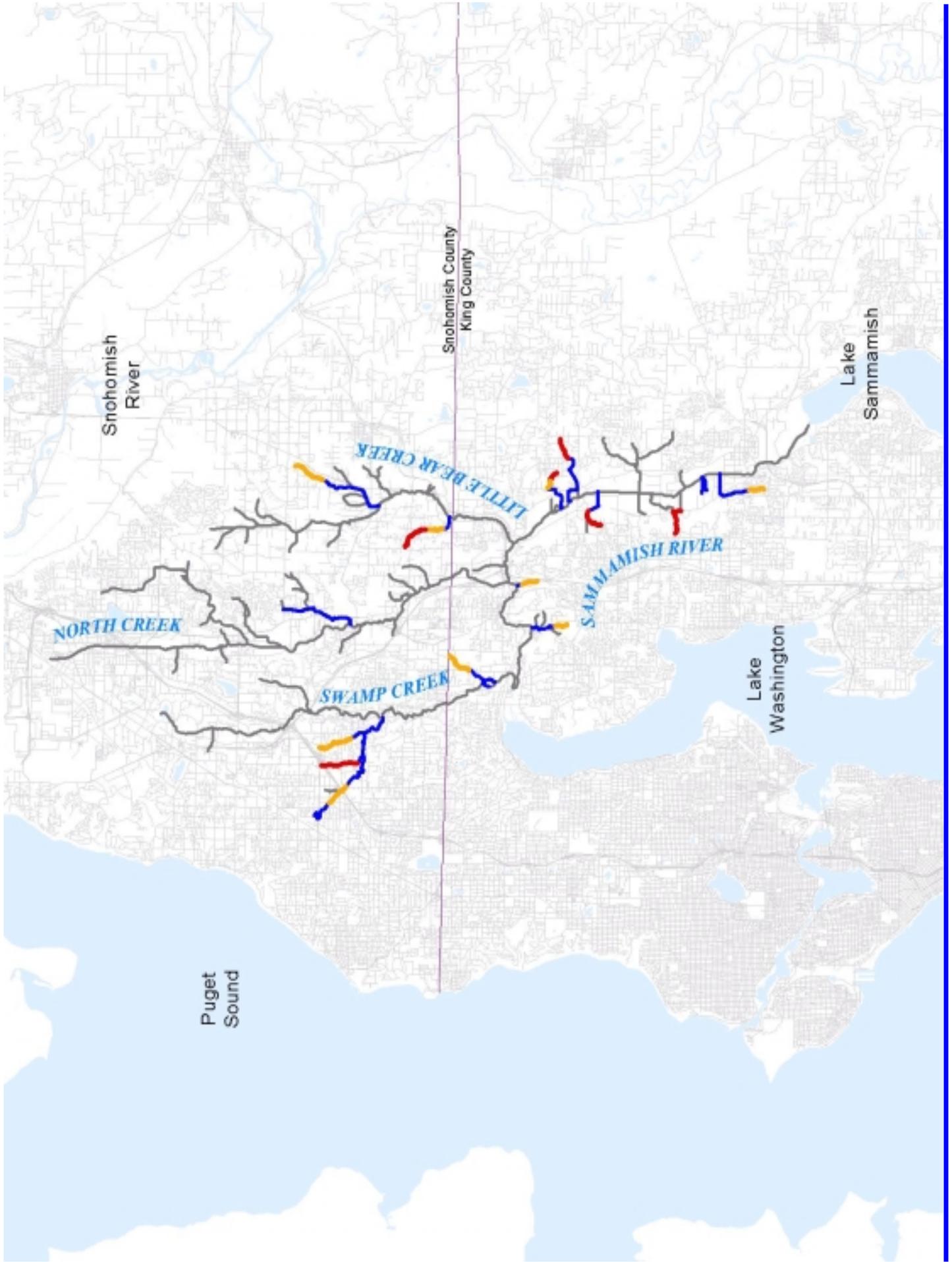
- Inventory Methods for Wadable Streams in King County (2001)
- Field training with King County staff
- Reconnaissance; prioritize streams for surveys
- Pre-field calibration between two field crews
- Survey August through October 2001
- Independent survey of test reach to assure quality control with King County crews

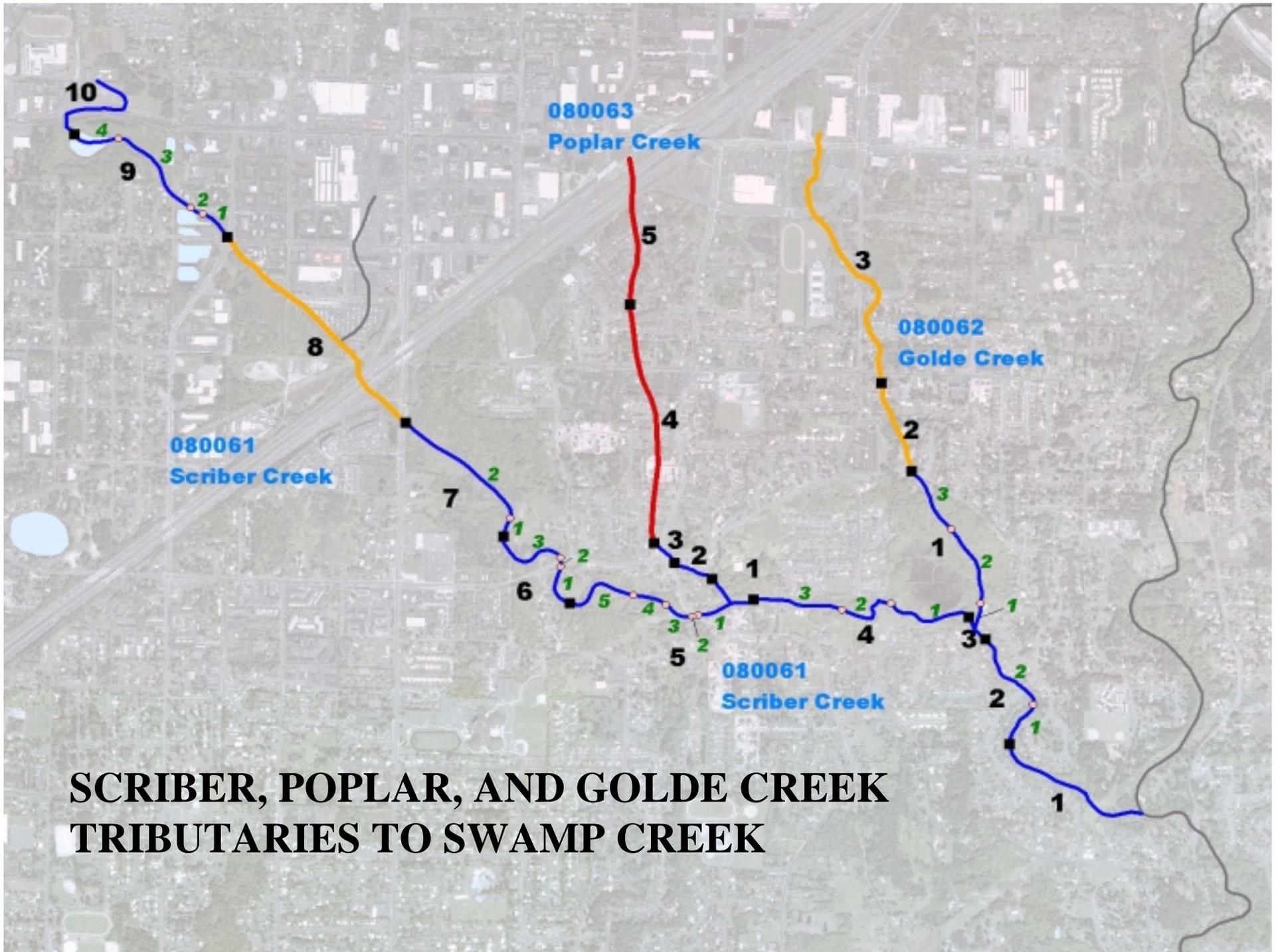
Actual Field Experience

- Reconnaissance
- Prioritize
- Survey
- Re-prioritize
- Blood, Sweat, Tears, Extra Hip Boots
- Re-prioritize
- Survey, More Extra Hip Boots
- Re-prioritize

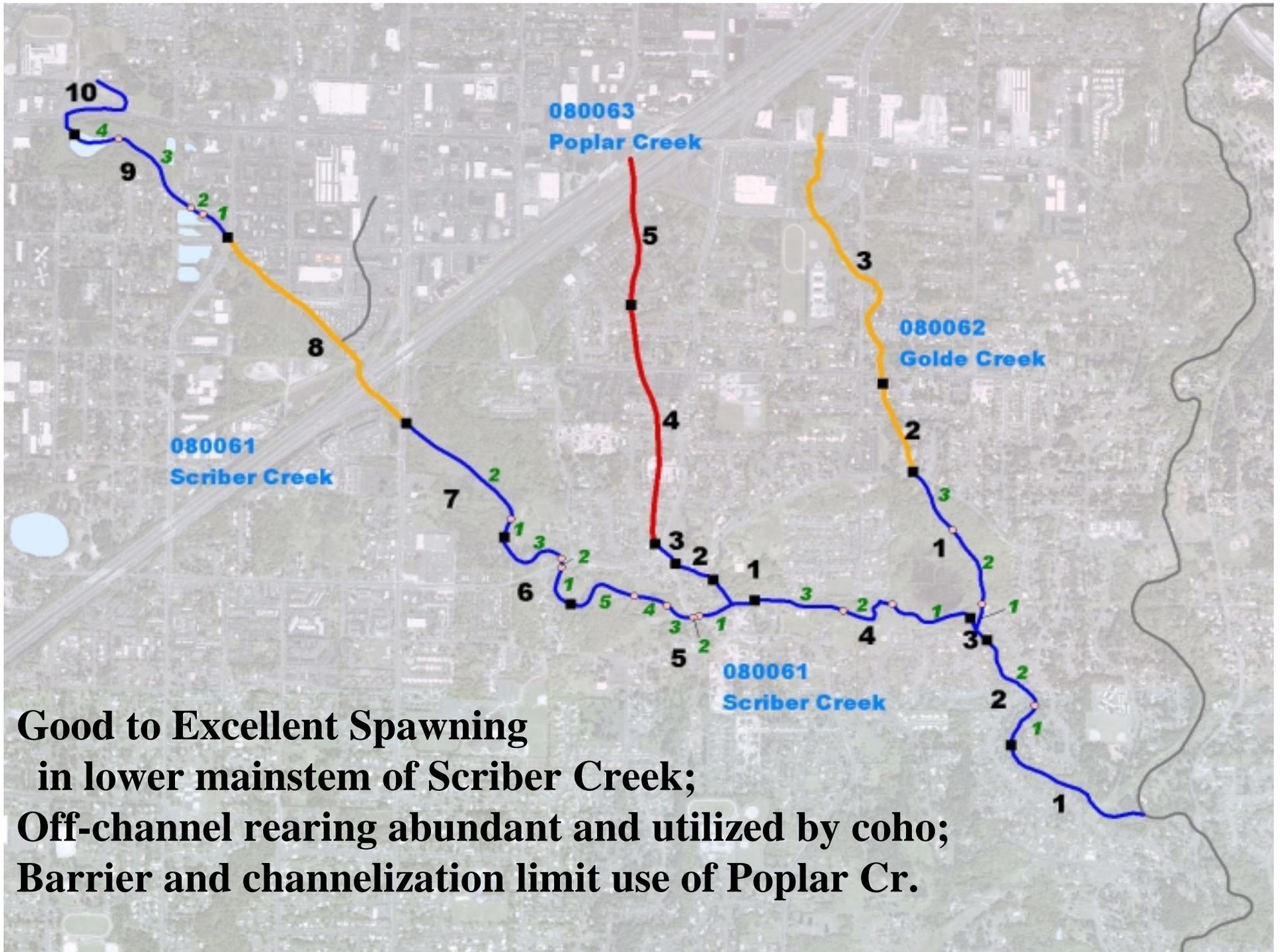
Resolution of Minor Tributary Length in Project by Status

Source / Status	Stream Miles	% of SSHIAP
Total estimated stream length (WRIA, others)	27	123%
Total SSHIAP	21.9	100%
Surveyed length	13.3	61%
Not surveyable, negligible habitat	6.9	32%
Not surveyable, some habitat	1.7	7%

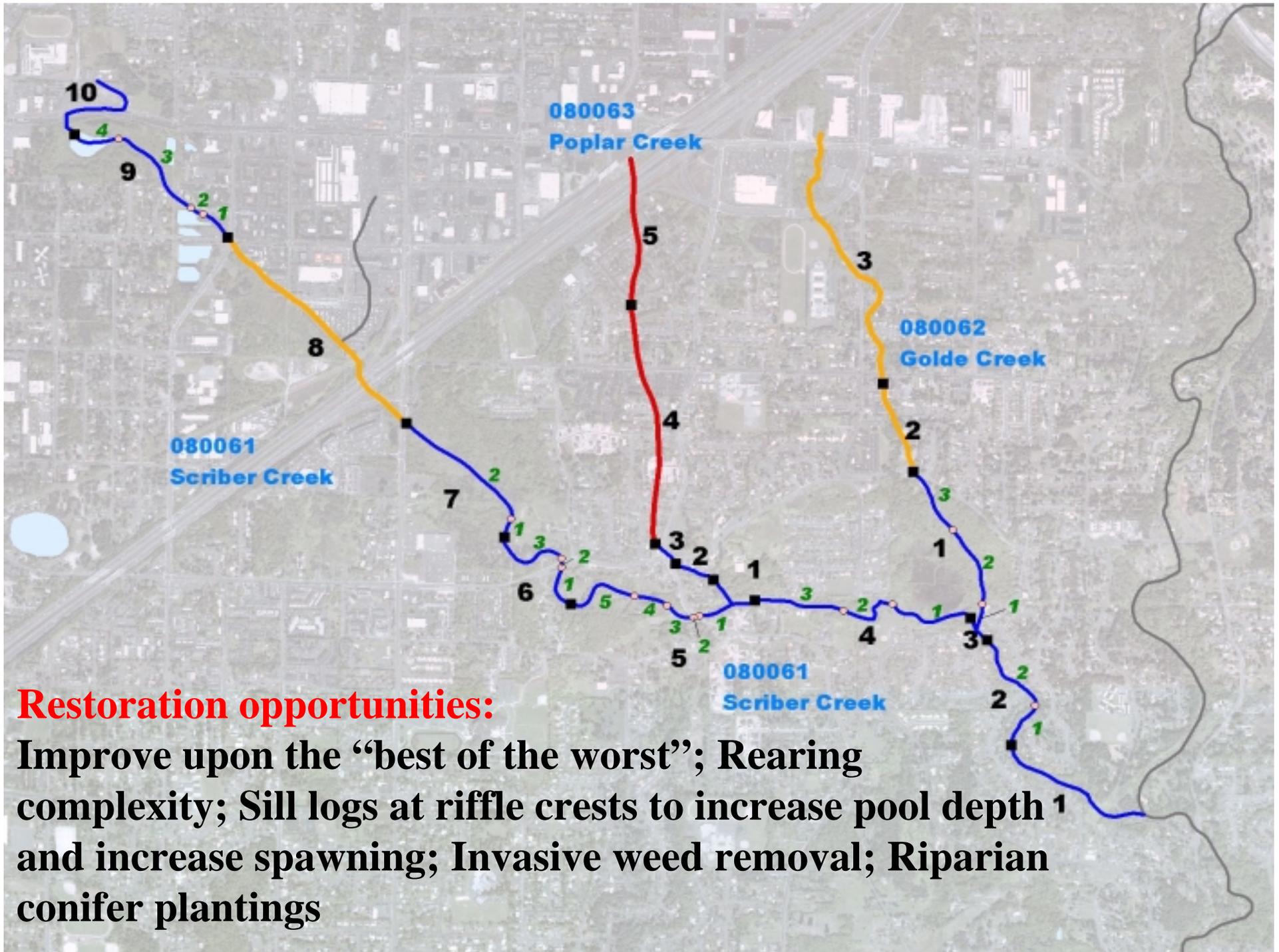




**SCRIBER, POPLAR, AND GOLDE CREEK
TRIBUTARIES TO SWAMP CREEK**



**Good to Excellent Spawning
in lower mainstem of Scriber Creek;
Off-channel rearing abundant and utilized by coho;
Barrier and channelization limit use of Poplar Cr.**



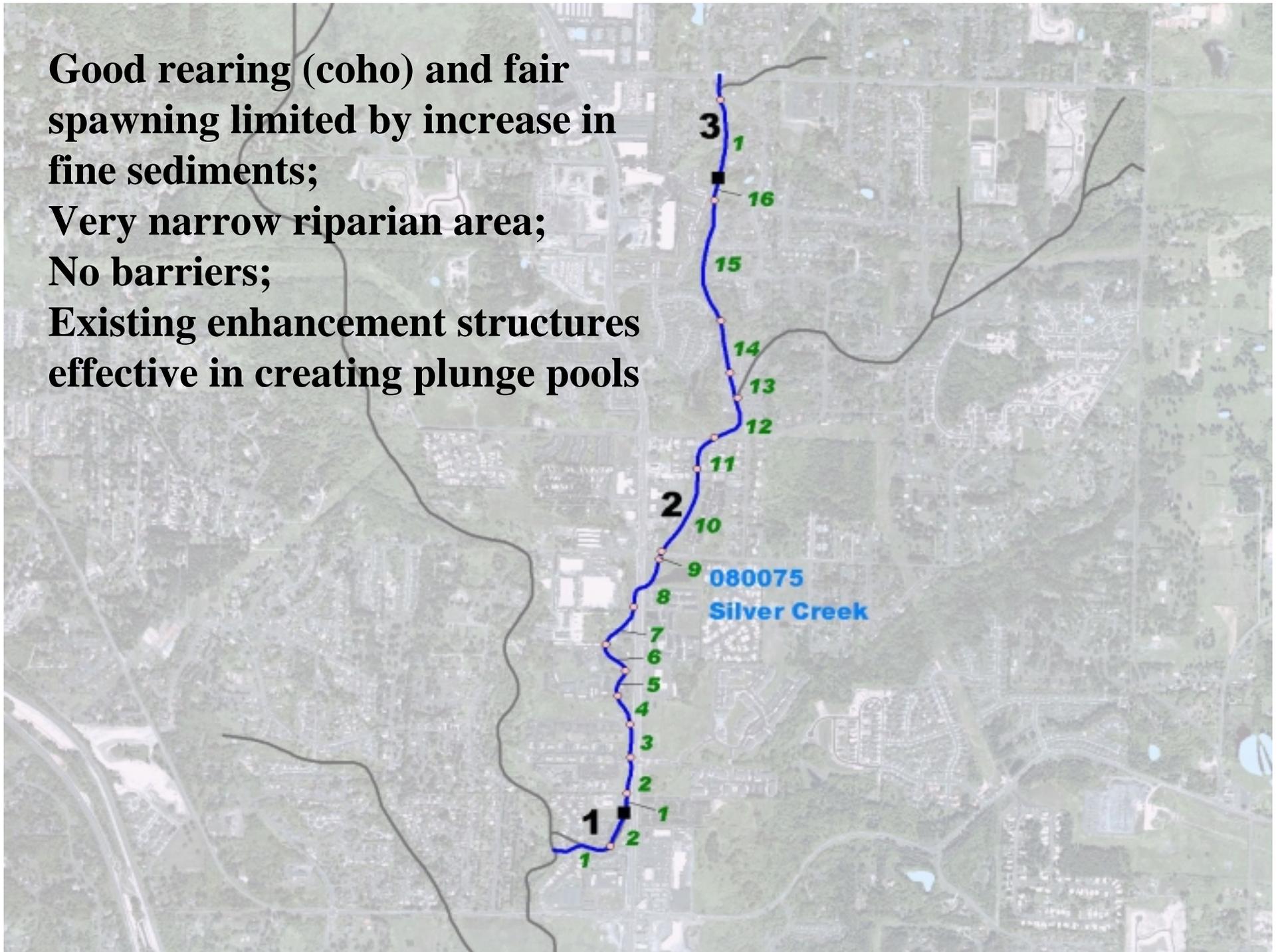
Restoration opportunities:

Improve upon the “best of the worst”; Rearing complexity; Sill logs at riffle crests to increase pool depth ¹ and increase spawning; Invasive weed removal; Riparian conifer plantings

Scriber Creek Off-channel Rearing



**Good rearing (coho) and fair spawning limited by increase in fine sediments;
Very narrow riparian area;
No barriers;
Existing enhancement structures effective in creating plunge pools**

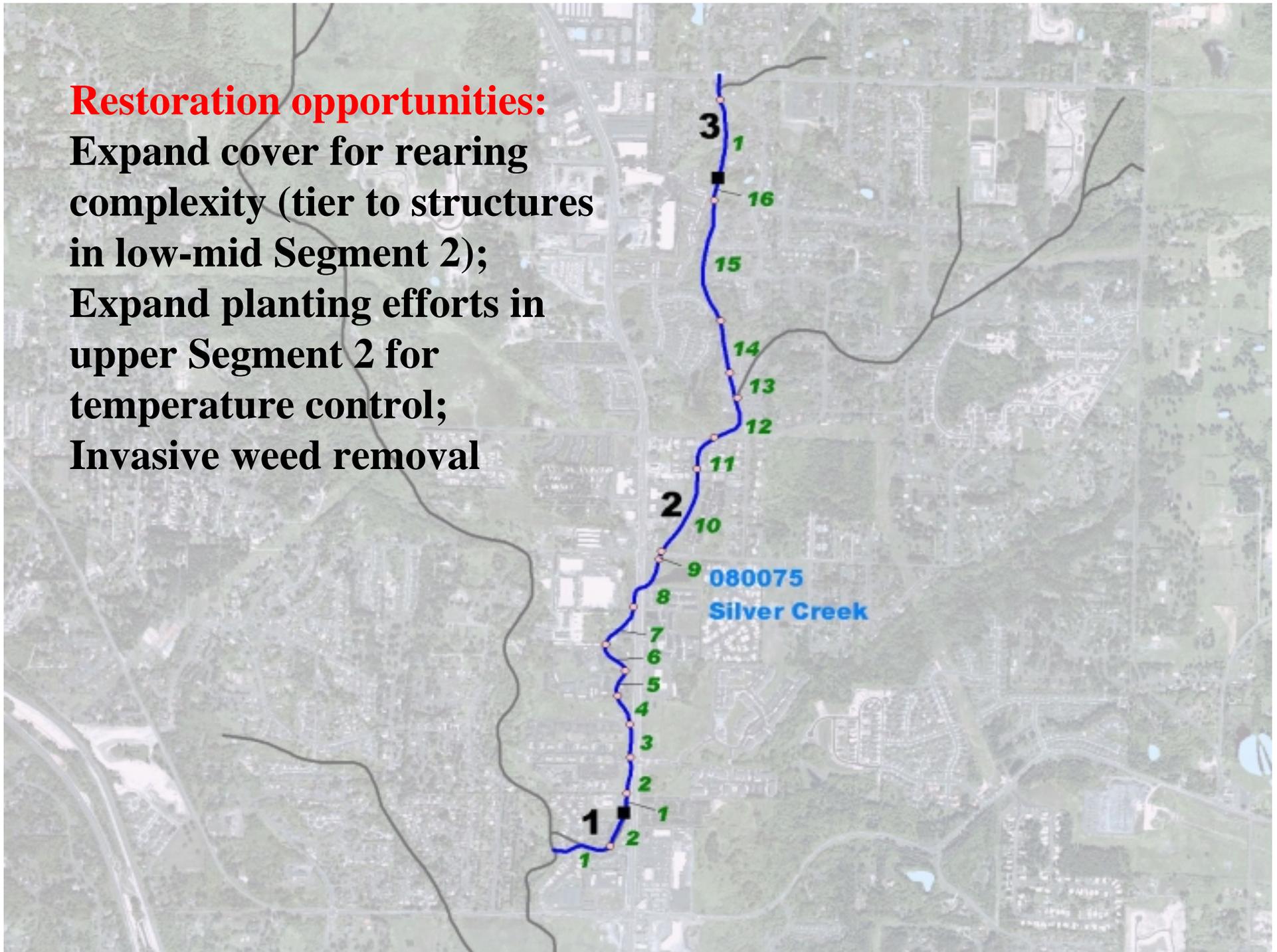


Restoration opportunities:

Expand cover for rearing complexity (tier to structures in low-mid Segment 2);

Expand planting efforts in upper Segment 2 for temperature control;

Invasive weed removal



**Good rearing (coho) and limited,
fair spawning gravels in between
depositional areas;**

**Multiple channel thread for
Swamp Creek provides off-
channel habitat in wetland;**

**Very narrow riparian area;
No barriers**

080060A

080060

Little Swamp Creek

Restoration opportunities:

**Invasive removal and conifer
plantings in riparian wetlands;**

**Limited opportunities upstream of
Segment 4**

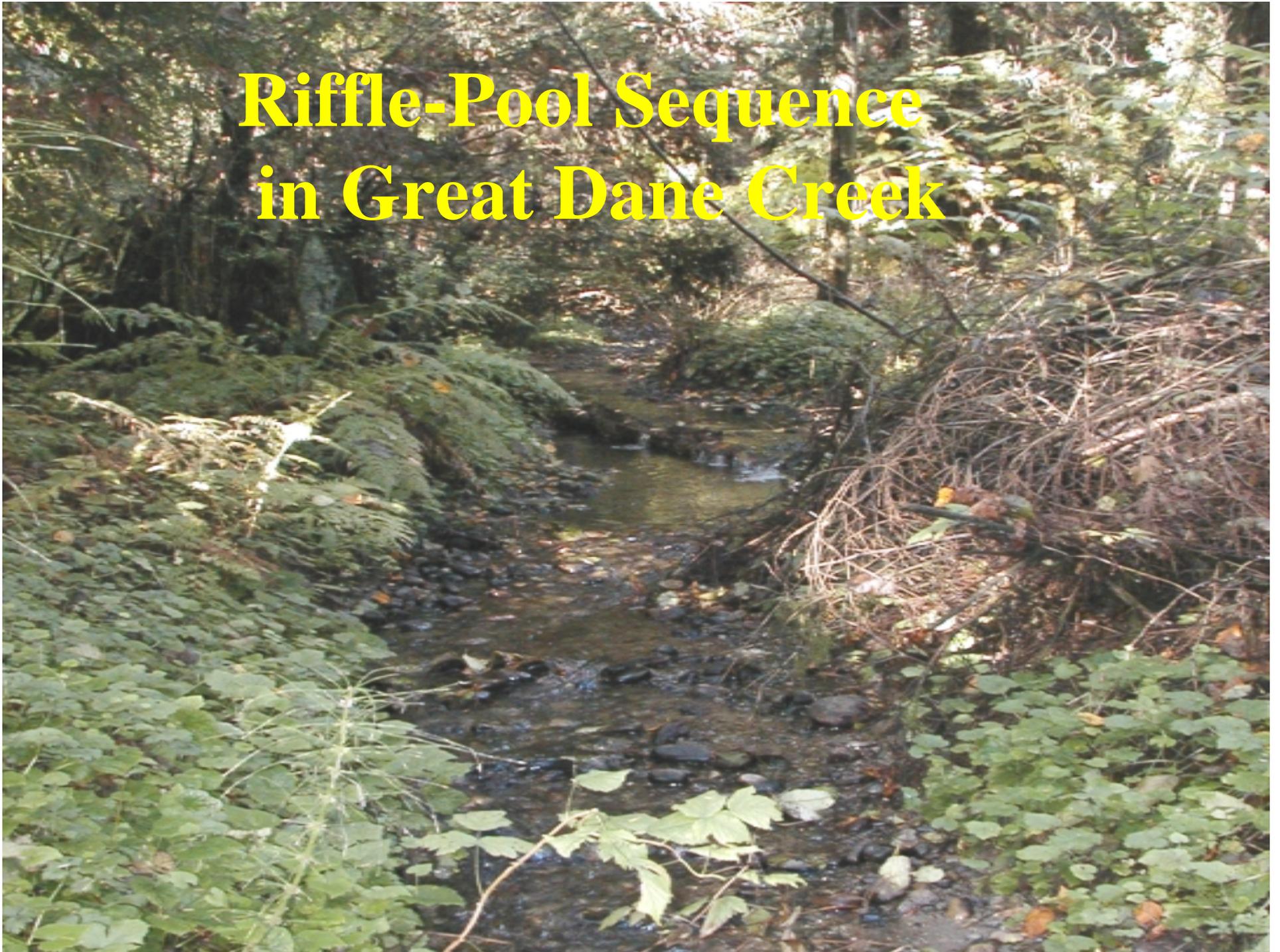
**Good spawning habitat in Segments 1 and 2;
Good rearing habitat throughout (coho); Low
flows isolate juveniles in pools up-stream of
Segment 3;
Very brushy under open, mixed conifer-
deciduous canopy up-stream of Segment 3;
Good upstream shading;
No barriers**

Restoration opportunities:

**Install LWD to scour pools to
improve overwintering
success;
Release thinnings and
underplanting with conifers in
Segments 1, 3, 4, 5**



Riffle-Pool Sequence in Great Dane Creek



Barrier: concrete chute at 27% at confluence; upstream drainage area and habitat too limited to warrant restoration

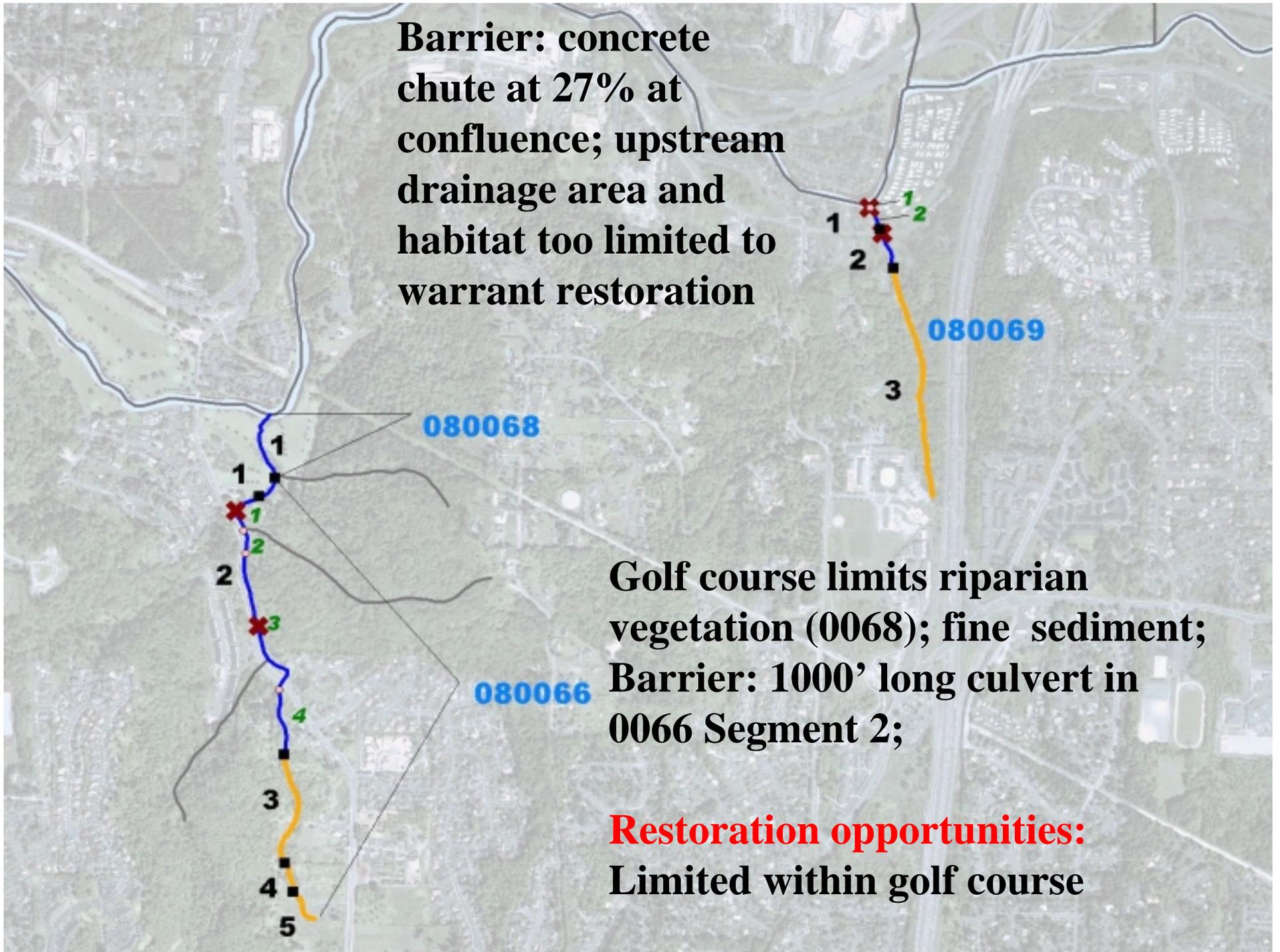
080068

080069

080066

Golf course limits riparian vegetation (0068); fine sediment; Barrier: 1000' long culvert in 0066 Segment 2;

**Restoration opportunities:
Limited within golf course**



Poor to fair rearing habitat as a result of pool filling with fine sediment; good riparian cover; concrete weir at confluence may be partial barrier

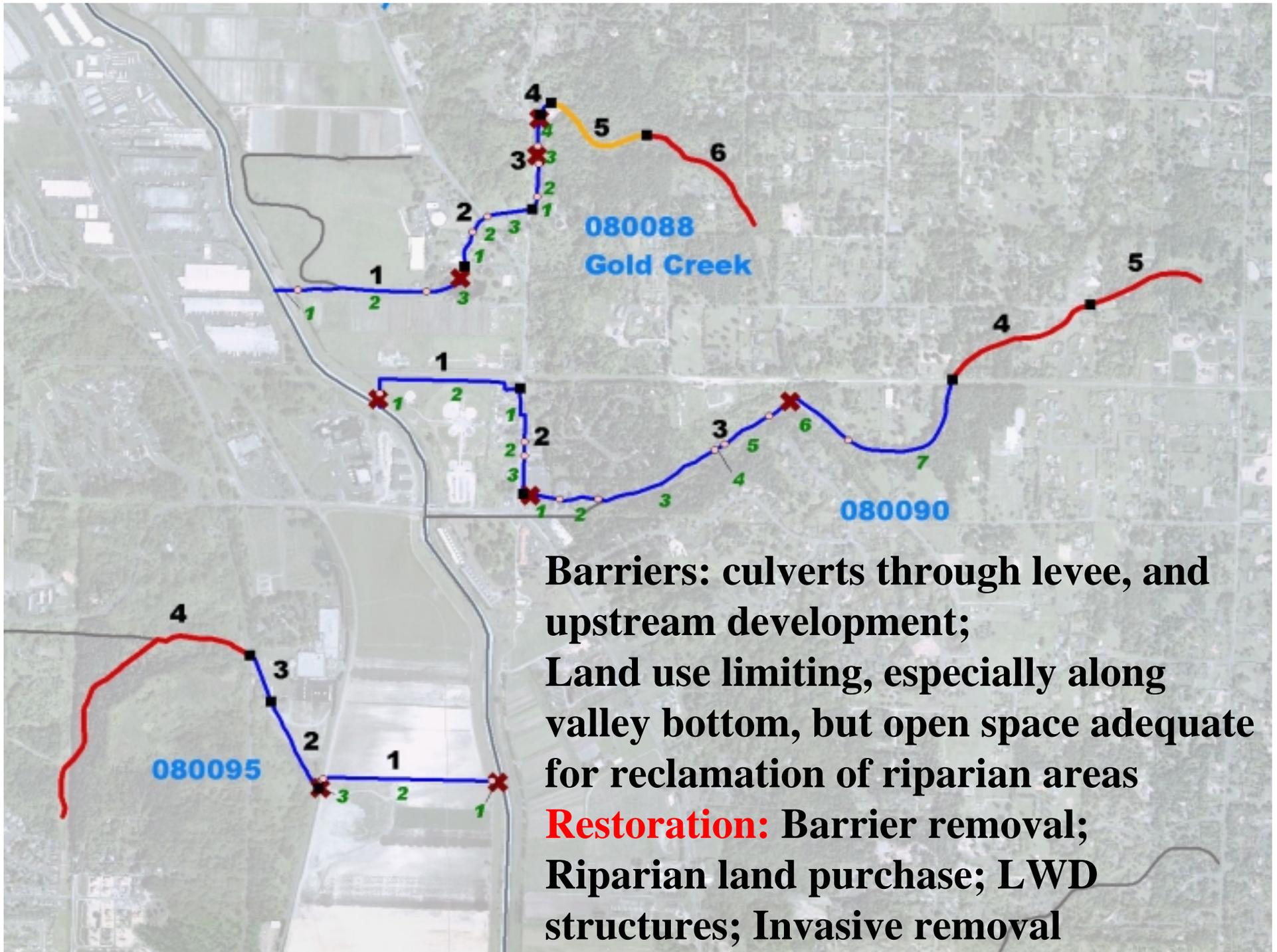
Restoration opportunities:

Investigate sediment source control;

Barrier removal could be coupled with off channel pool excavation adjacent to Little Bear Creek;

Landowner issues

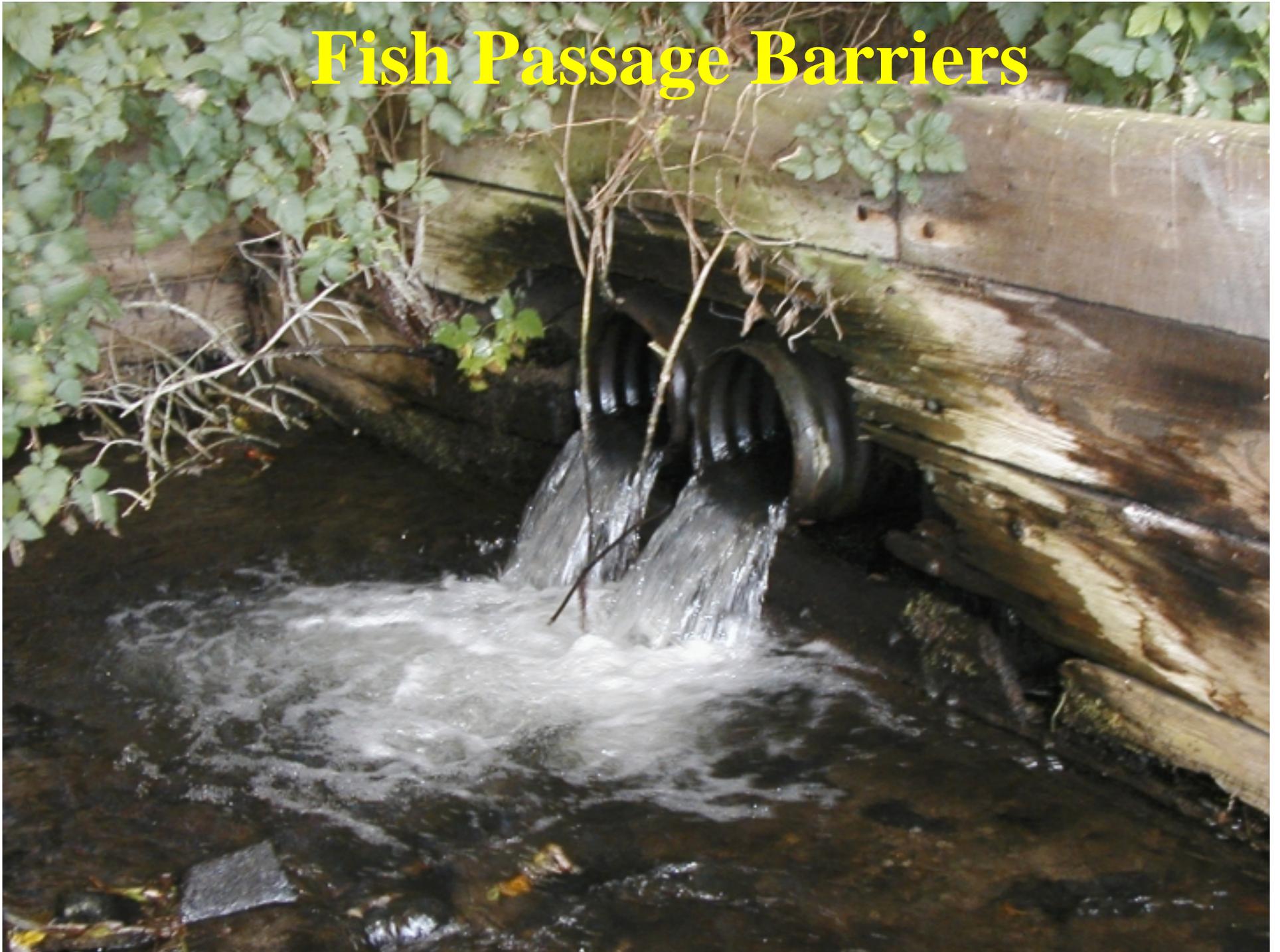




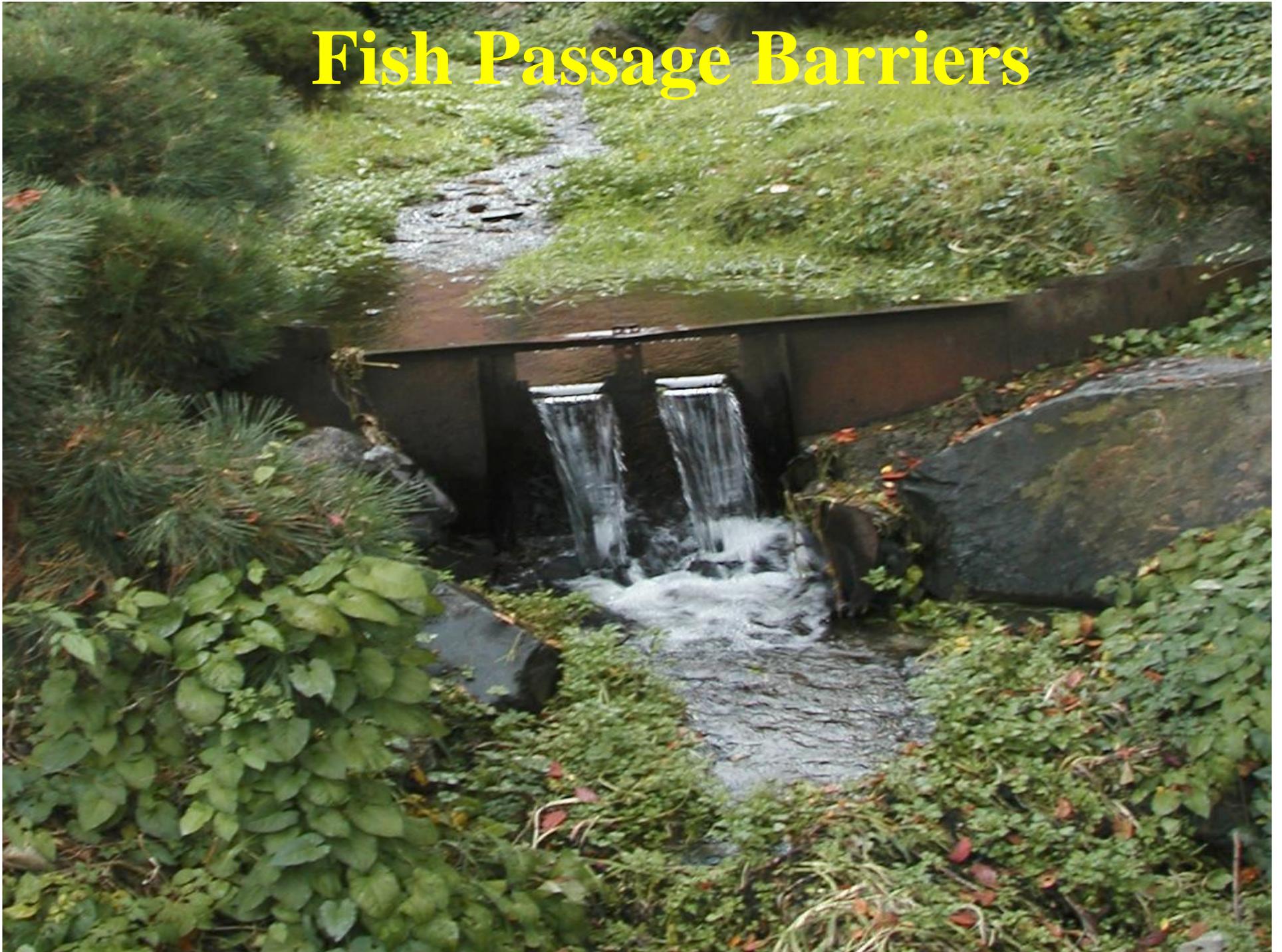
Degraded Habitat

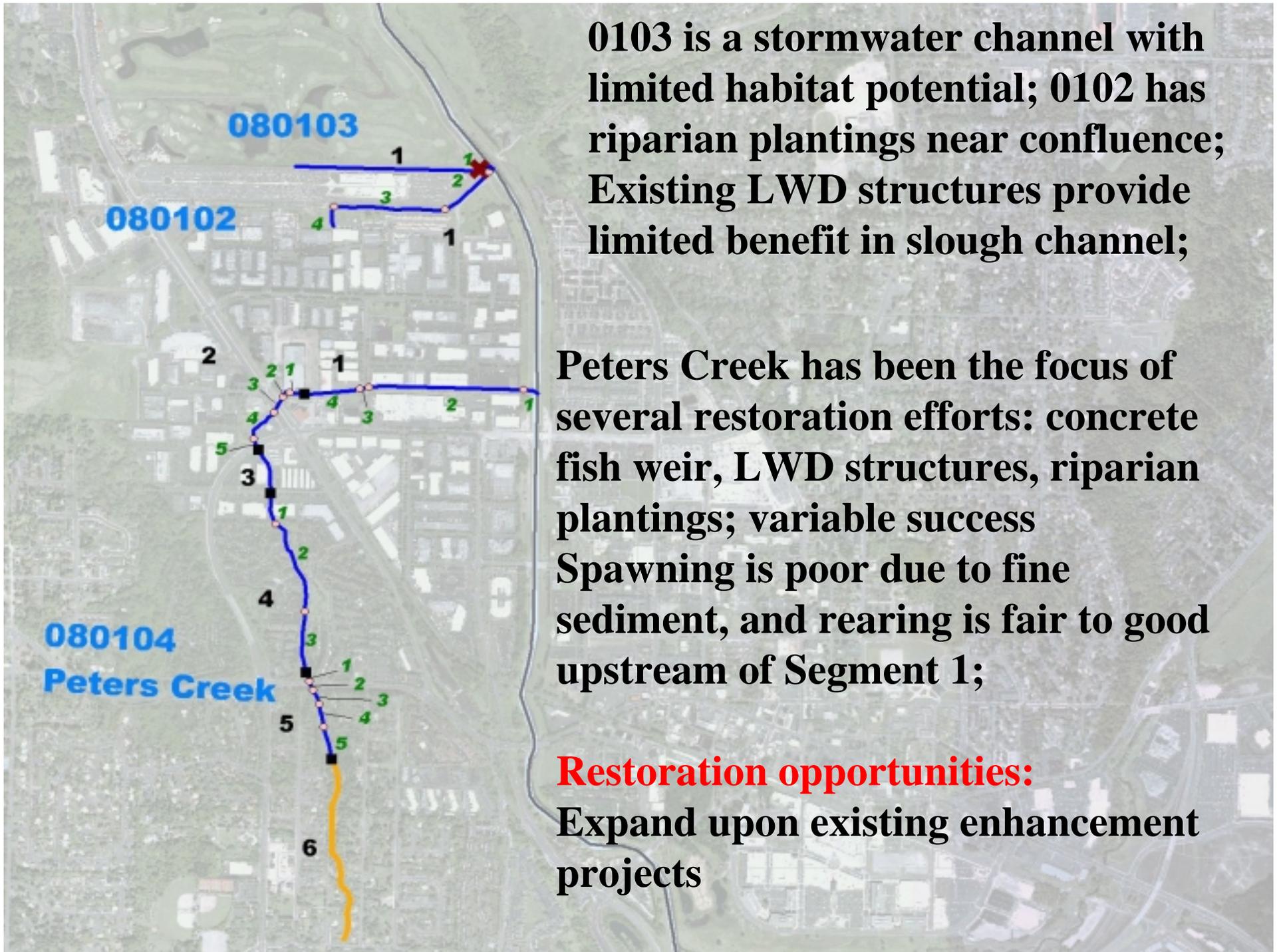


Fish Passage Barriers



Fish Passage Barriers





0103 is a stormwater channel with limited habitat potential; 0102 has riparian plantings near confluence; Existing LWD structures provide limited benefit in slough channel;

Peters Creek has been the focus of several restoration efforts: concrete fish weir, LWD structures, riparian plantings; variable success
Spawning is poor due to fine sediment, and rearing is fair to good upstream of Segment 1;

Restoration opportunities:
Expand upon existing enhancement projects

Degraded Habitat



Restoration Efforts



Chinook Carcass in Peters Creek



