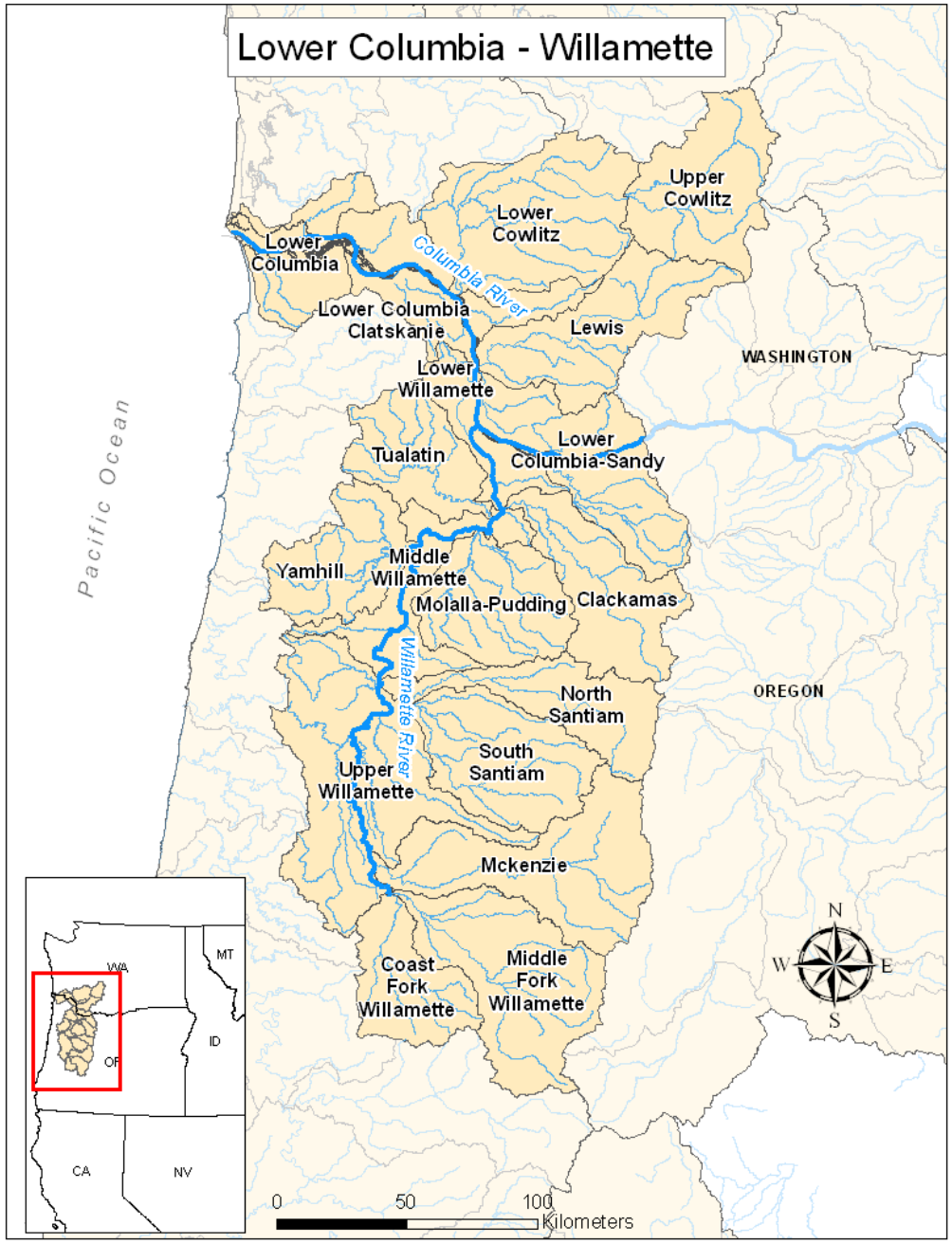
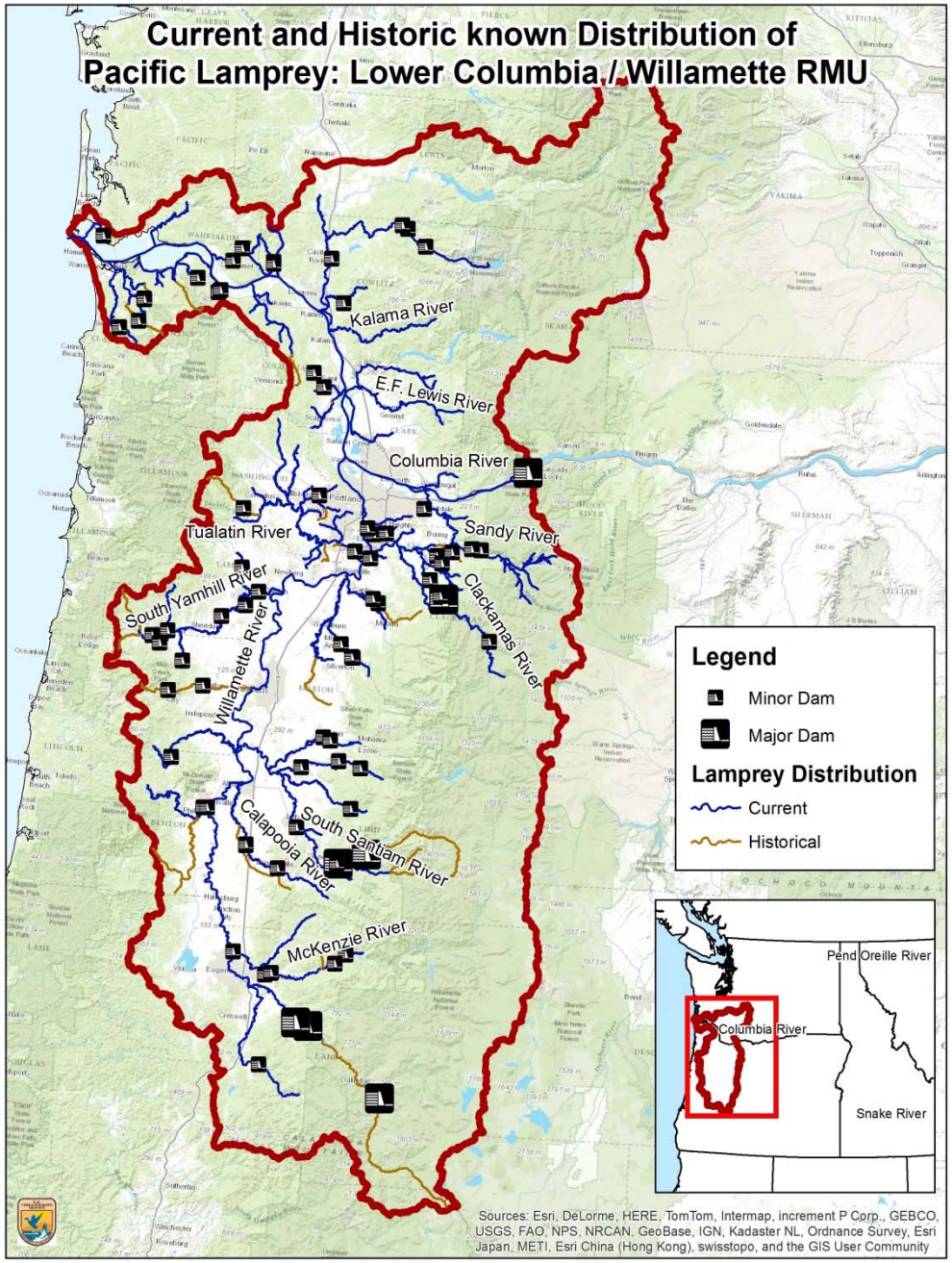
Pacific Lamprey Regional Implementation Plan *for the* Willamette (Sub-Unit) RMU


Lower Columbia - Willamette
Upper Cowlitz
Lower Cowlitz
Lower Columbia
Columbia River
Lower Columbia Clatskanie
Lewis
WASHINGTON
Lower Willamette
Lower Columbia-Sandy
Tualatin
Pacific Ocean
Yamhill
Middle Willamette
Molalla-Pudding
Clackamas
Willamette River
North Santiam
OREGON
South Santiam
Upper Willamette
Mckenzie
Coast Fork Willamette
Middle Fork Willamette
N
W
E
S
WA
MT
ID
OR
CA
NV
0
50
100
Kilometers


Current and Historic known Distribution of
Pacific Lamprey: Lower Columbia / Willamette RMU
Kalama River
E.F. Lewis River
Columbia River
Tualatin River
Sandy River
South Yamhill River
Willamette River
Clackamas River
Calapooia River
South Santiam River
McKenzie River
Legend
Minor Dam
Major Dam
Lamprey Distribution
Current
Historical
Pend Oreille River
Columbia River
Snake River
Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

Major threats to Pacific Lamprey in the Willamette Sub-Unit

- Stream and Floodplain degradation
- Passage (Adult and Juvenile)
- Dewatering and Flow Management

<u>Moderate to High</u>

- Water quality, Predation, and Lack of awareness

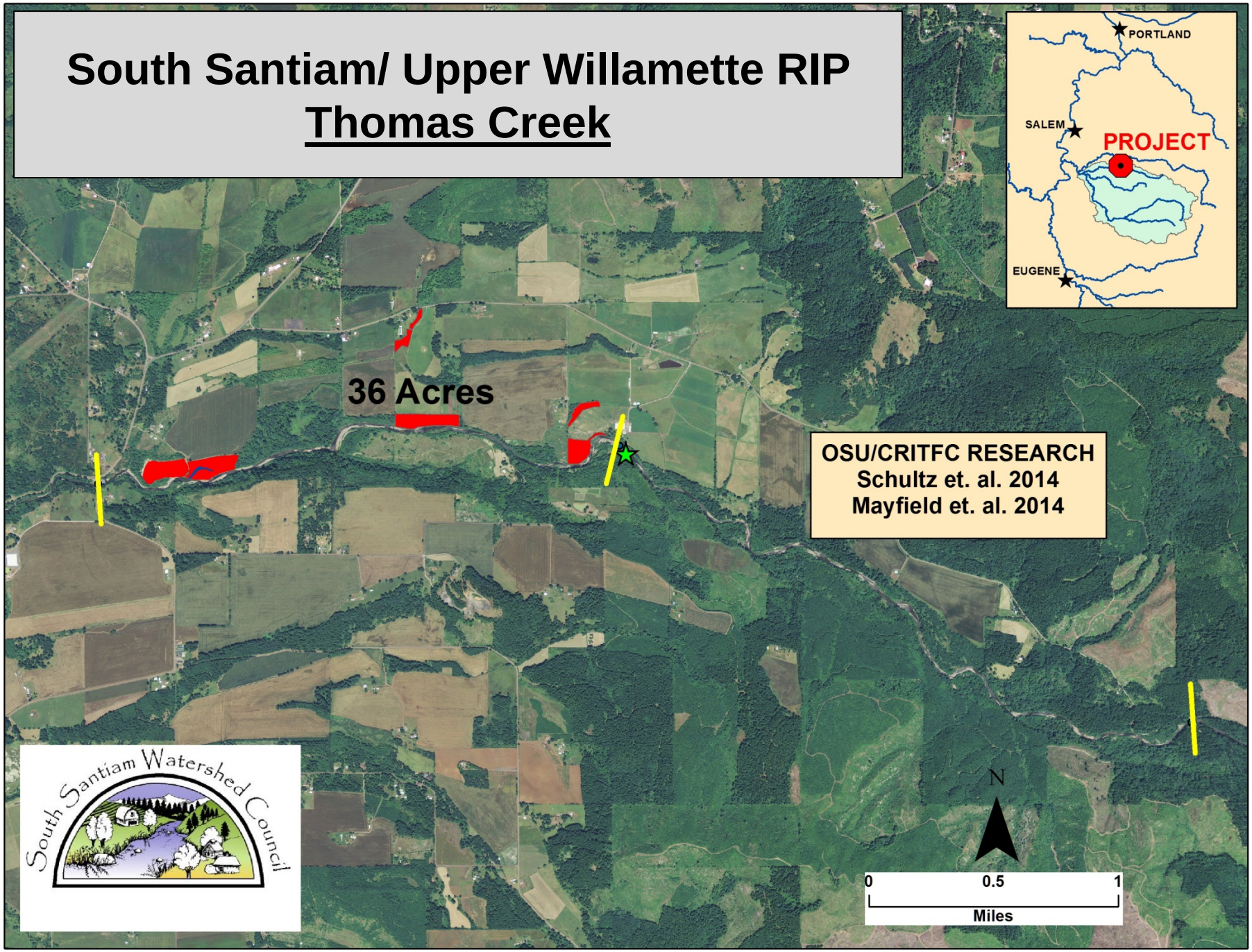
Summary of Past Actions

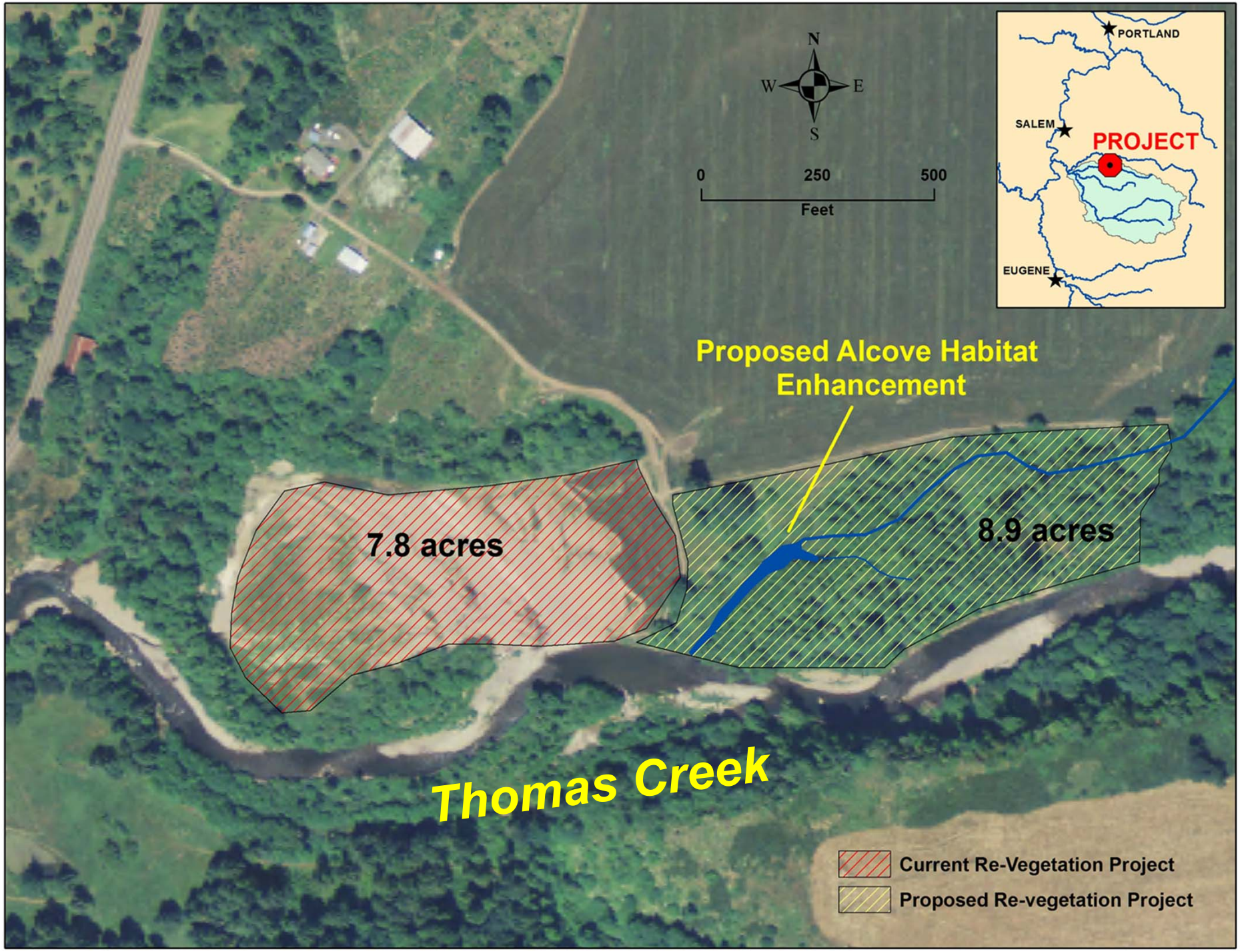
- Ladder improvements and ramp installation at River Mill, Faraday, and North Fork Dams on Clackamas River
- Fall Creek Translocation Project
- Floodplain enhancement projects in the Middle Willamette and Mckenzie watersheds
- Distribution and occupancy surveys throughout watersheds

Project Proposals

- Side channel and Floodplain Enhancement projects on South Santiam (Thomas and Crabtree Creeks) and North Santiam (Dieckman Creek)
- Yamhill Basin Distribution and Occupancy Surveys
- Lower South Fork Mckenzie River Floodplain Enhancement Project

South Santiam/ Upper Willamette RIP
Thomas Creek




N
W
E
S
0
250
500
Feet
PORTLAND
SALEM
PROJECT
EUGENE
Proposed Alcove Habitat Enhancement
7.8 acres
8.9 acres
Thomas Creek
Current Re-Vegetation Project
Proposed Re-vegetation Project

Thomas Creek Project

- **Alcove – Increase Rearing Habitat**
  - **Re-establish Beaver Pond (Water Storage)**
  - **Large Wood Placement**

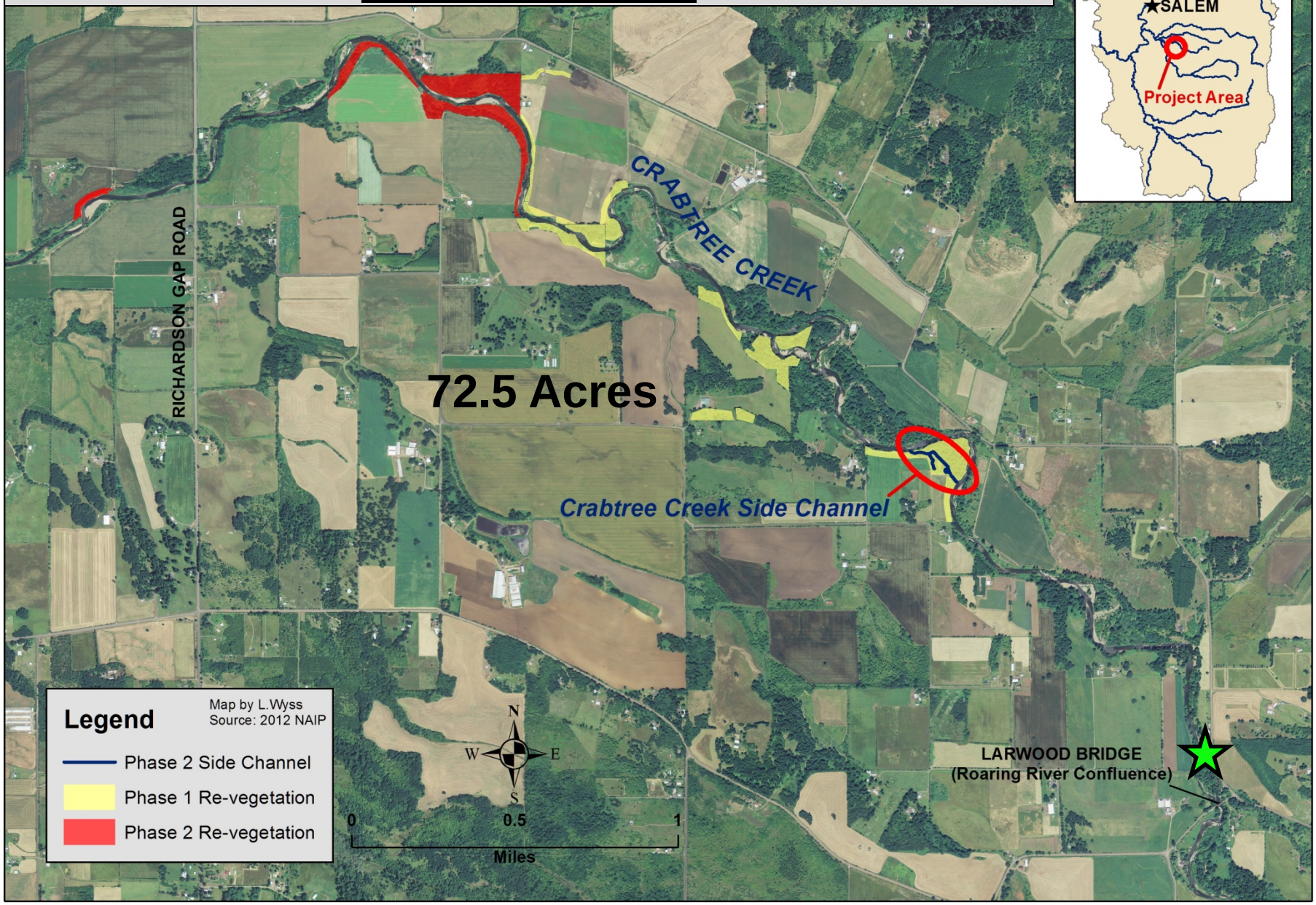
Thomas Creek Project

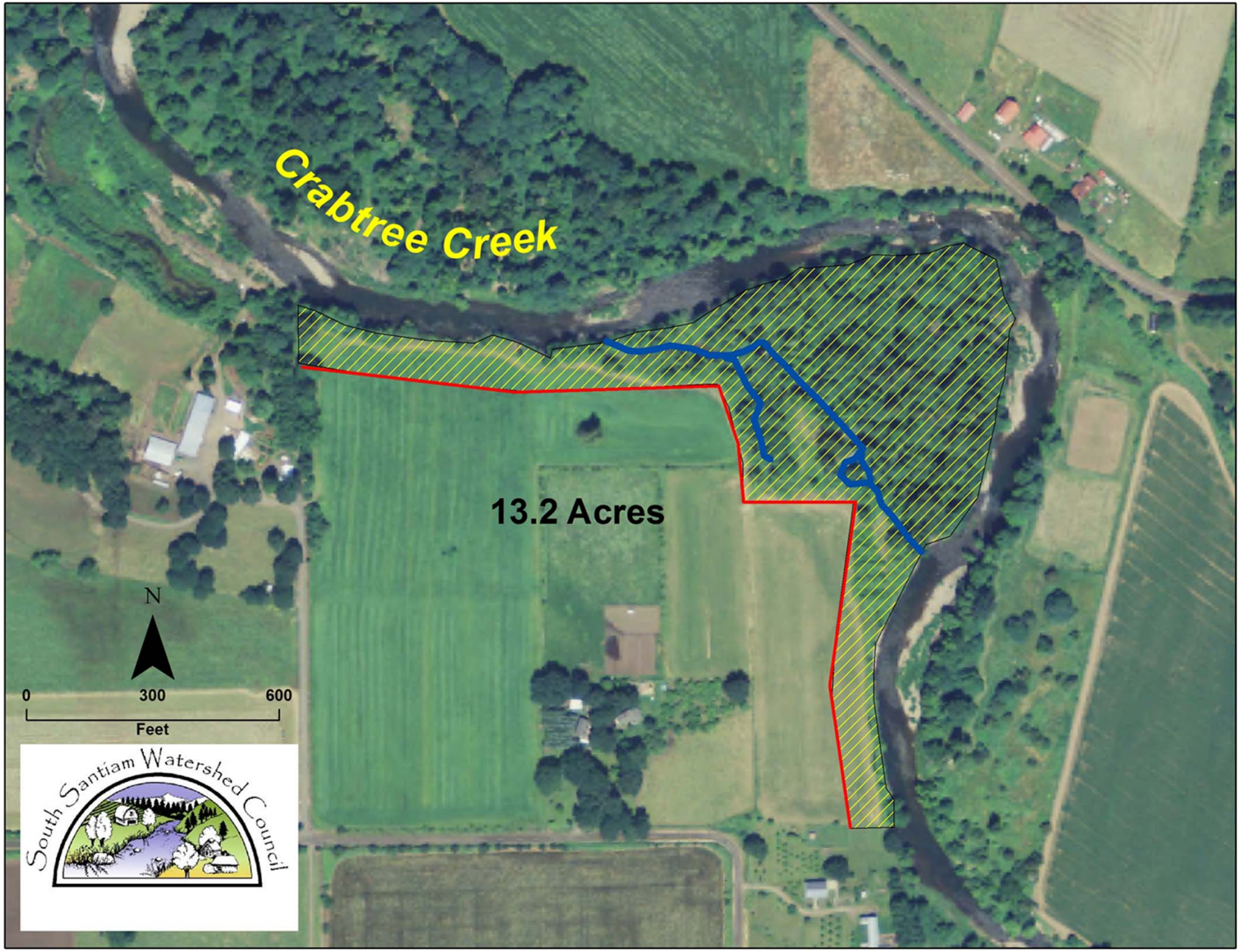
- **Riparian Forest – Food Sources**
  - **16.7 acres**
  - **Remove Noxious Weeds**
  - **Re-plant Native Shrubs & Trees**

Thomas Creek Project

- In-stream Work
  - $24,000 – Contracted Services/ Materials
  - $4,500 – Project Manager
  - $23,000 – Donated Logs
- Riparian Re-vegetation Work
  - $111,000 – Contracted Services
    - Treatment and Plant
    - 5 years for Plant Establishment
  - $29,300 – Plant Materials
  - $18,500 – Project Manager

South Santiam/ Upper Willamette RIP
Crabtree Creek




Crabtree Creek
13.2 Acres
N
0
300
600
Feet
South Santiam Watershed Council

Crabtree Creek Project

- **Side Channel/ Alcove – Increase Rearing Habitat**
  - **Large Wood Placement**
  - **Active Beaver Site**

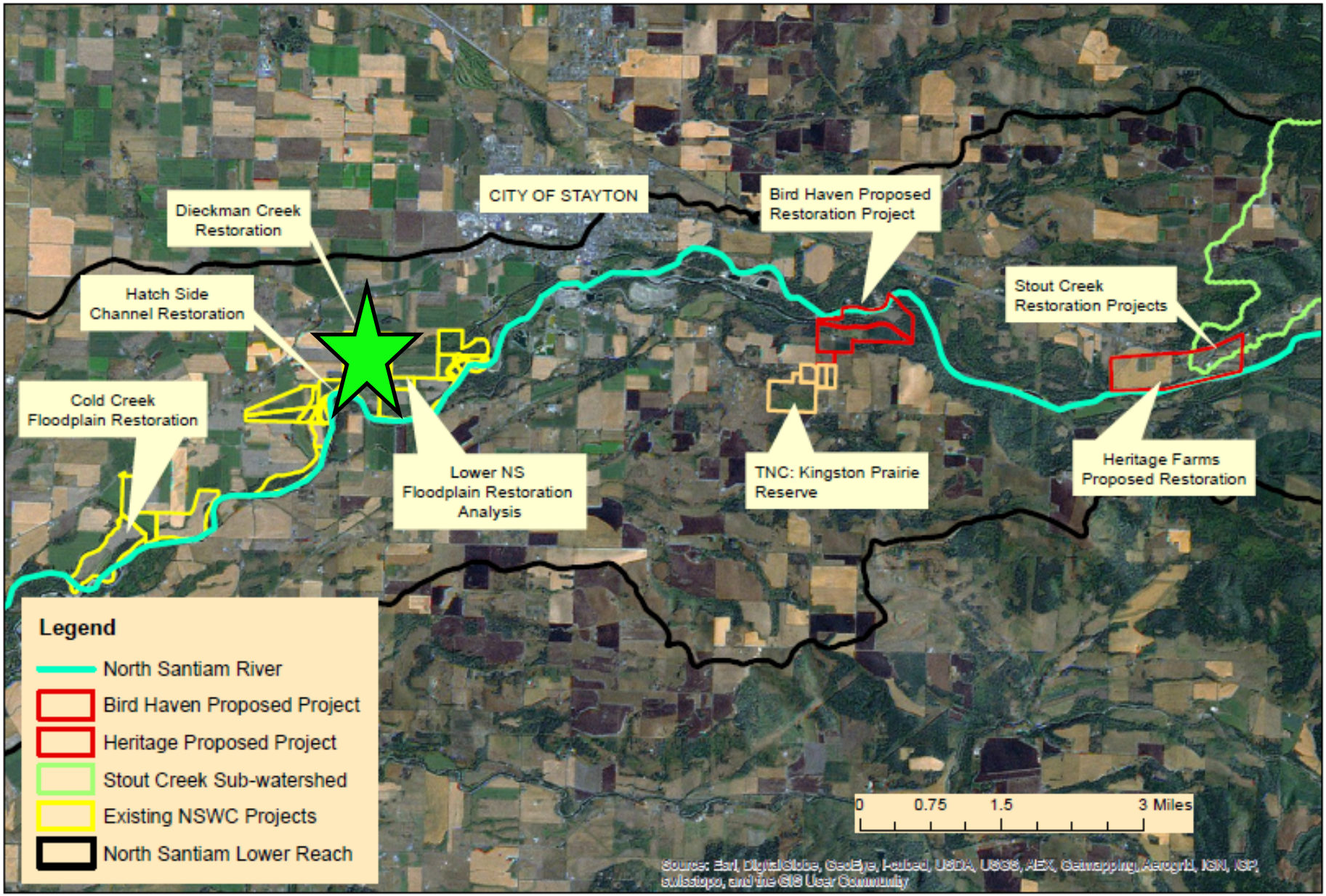
Crabtree Creek Project

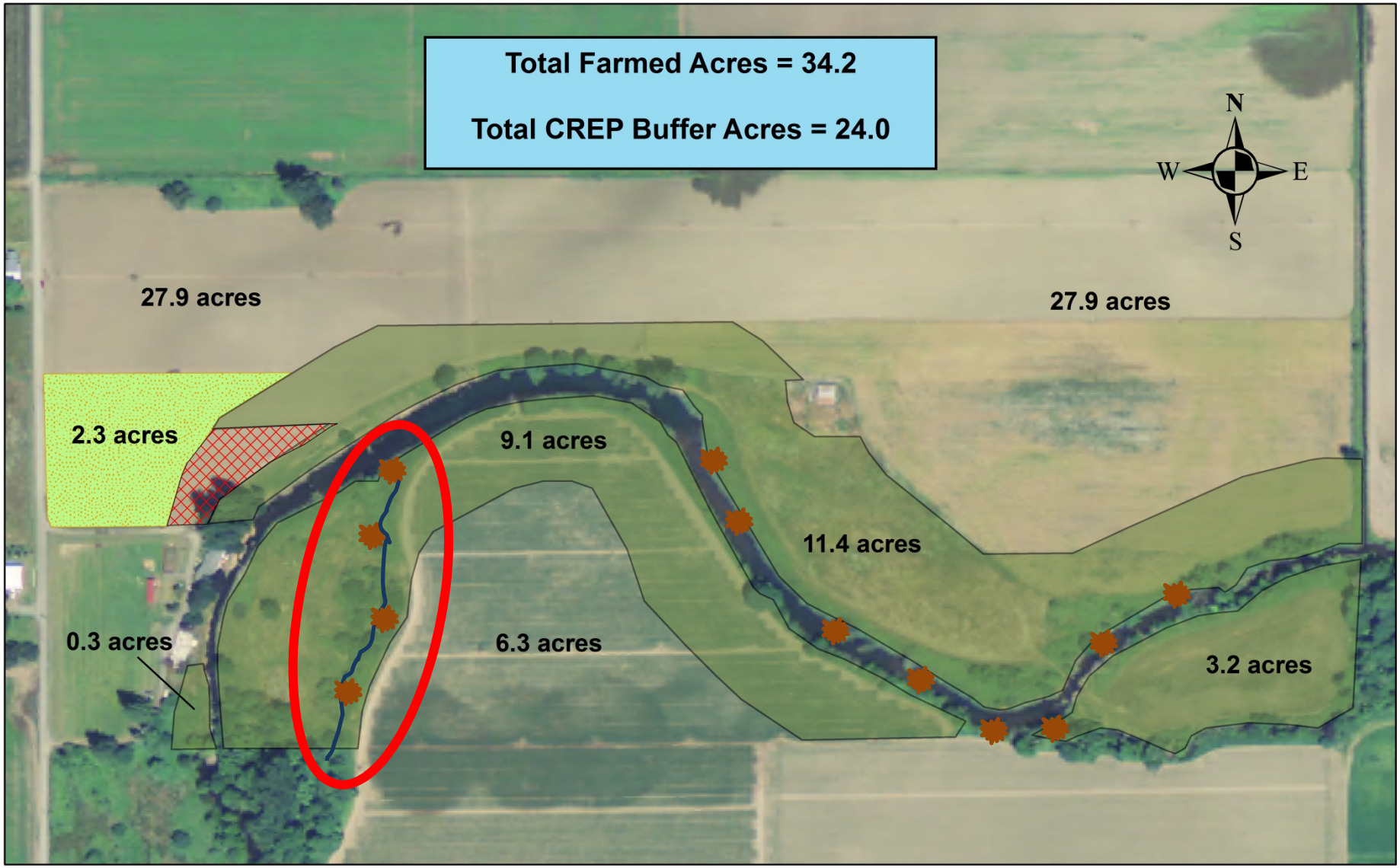
- **Riparian Forest – Food Sources**
  - **13.2 acres**
  - **Remove Noxious Weeds**
  - **Re-plant Native Shrubs & Trees**

Crabtree Creek Project

- In-stream Work
  - $24,000 – Contracted Services/ Materials
  - $4,500 – Project Manager
  - $16,500 – Donated Logs
- Riparian Re-vegetation Work
  - $86,630 – Contracted Services
    - Treatment and Plant
    - 5 years for Plant Establishment
  - $23,100 – Plant Materials
  - $18,500 – Project Manager

Lower North Santiam River Restoration Projects





0 250 500
Feet

Eck Farm Project

Estimated Acres

Future Barn Site

CREP Buffer

New Pasture

Dieckman Creek Project

- **Side Channel – Increase Rearing Habitat**
  - **Enhance Side Channel Connection**
  - **Large Wood Placement**

Dieckman Creek Project

- Proposed Side Channel Work
  - $22,000 – Contracted Services/ Materials
  - $5,000 – Project Manager
  - $25,000 – Donated Logs