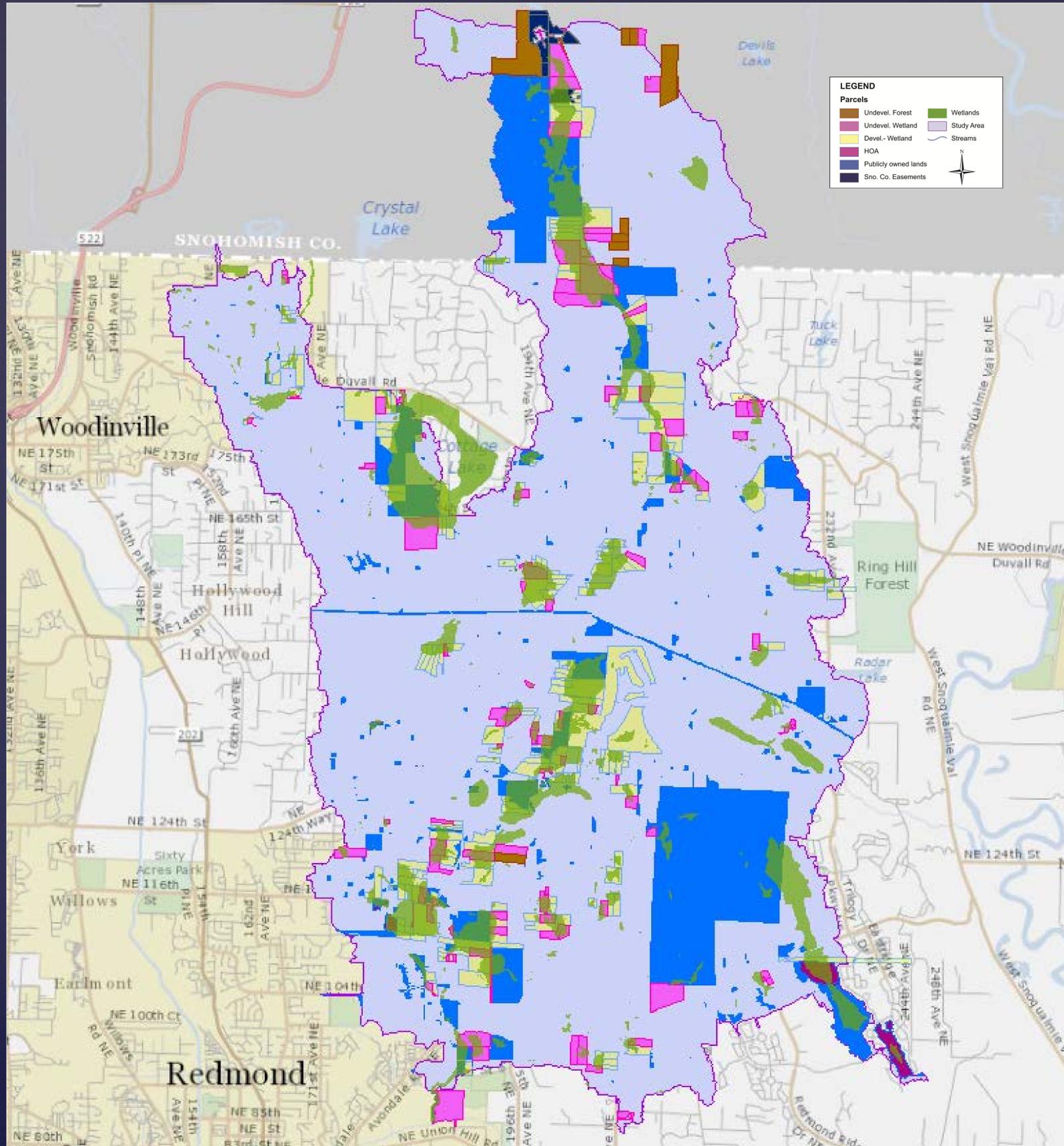


Bear Creek Watershed–Scale Stormwater Plan

Wetlands Assessment



Wetlands perform a wide array of ecological functions and environmental benefits: water purification, flood protection, groundwater recharge, streamflow maintenance, and valuable habitat for fish and wildlife.

There are approximately 250 mapped* wetlands in the Bear Creek basin study area (see map).

*There are very likely many more wetlands in the basin that are not mapped. And, not all mapped wetlands have been verified to actually be wetlands.

The intent of this wetlands assessment is to:

- catalog wetland presence and condition over the past 35 years,
- report on current conditions to the finest scale available,
- analyze where improvements to current conditions may be made,
- and suggest methods to bolster restoration efforts against the impacts of climate change.

We have several wetland datasets to work with, and none are fully accurate. One set contains 56 wetlands that were field checked in the early 1980s. Those wetlands were visually inspected remotely (via Geographic Information System) to estimate wetland loss. Initial results of the exercise are summarized in the table below.

Visual change in wetland area since 1981?	approx. area of wetlands (acres)	# of wetlands
No	727	42
Yes, in buffer	3	3
Possibly	179	3
Yes	192	8
Total	1101	56

Improvements to current conditions could include:

- Planting trees and shrubs in the wetland buffer
- Working with willing sellers to bring undeveloped parcels containing wetlands into public ownership
- Forming conservation easements on developed parcels that also containing a portion of larger, highly valued wetlands

The table below tallies the parcels described in the latter two bullets above.

Parcel description	Acres	# parcels
Undeveloped parcels not part of an HOA	676.77	104
Parcels with development attached to large wetland	1101.5	213
Undeveloped parcels adjacent to undeveloped parcels containing wetlands	139.37	12
Public land in the study area	2272.5	365

What else we will be doing:

- A literature review to determine what climate change adaptation strategies would be potentially appropriate for maintaining and enhancing wetland conditions in the Bear Creek Basin.
- Identifying and cross-referencing Category I and II wetlands with current land-use to determine level of risk and restoration (vegetation) need.

Potential Acquisition and Easement Opportunities around Wetlands in Bear Creek Basin Study Area.