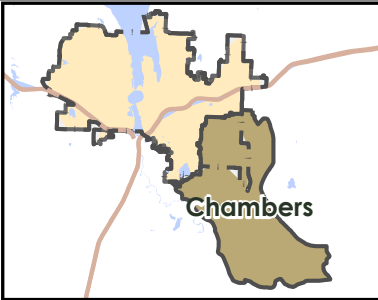


## Appendix 2—Basin Characteristics

### VICINITY MAP



## Chambers Basin

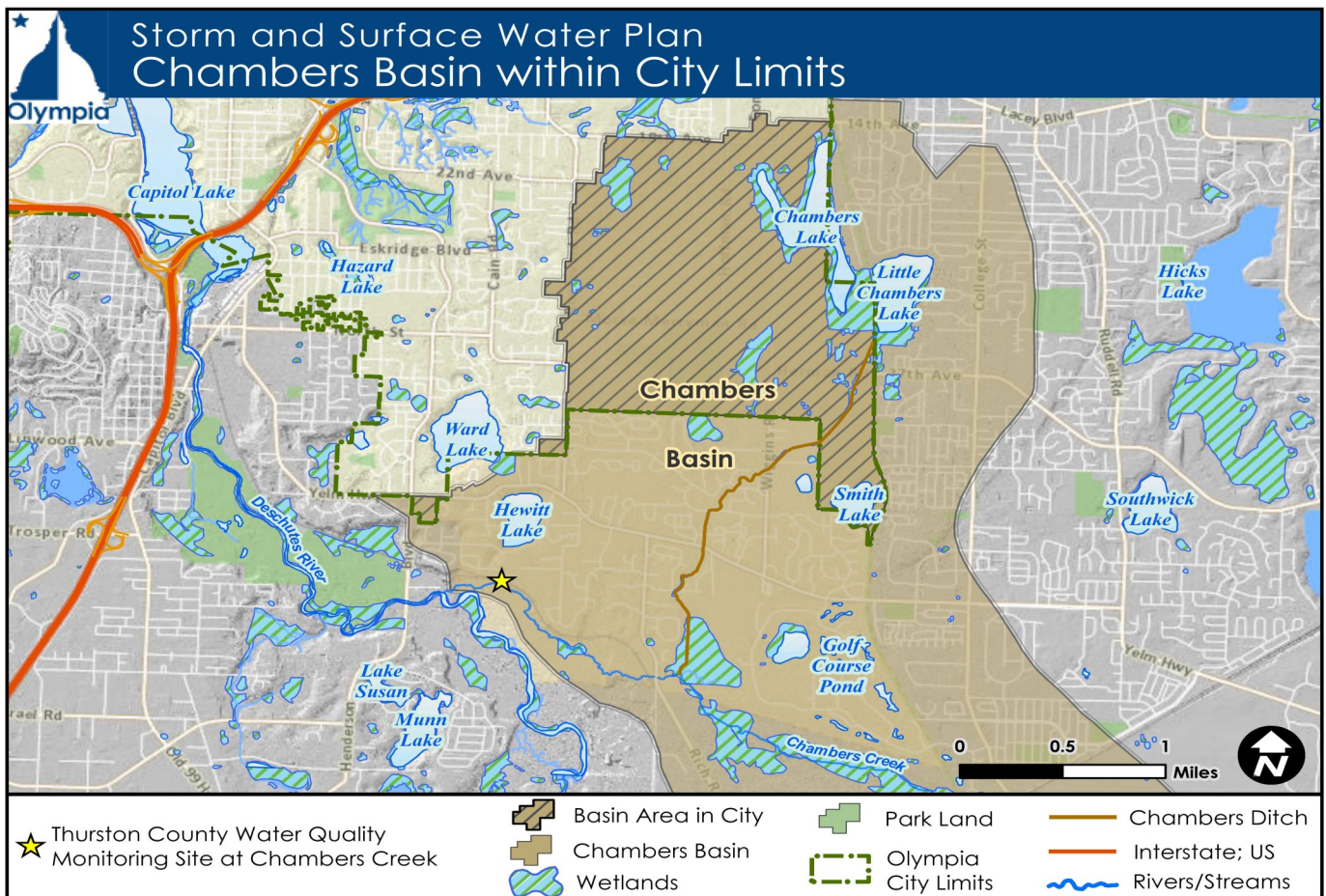
### Physical Characteristics

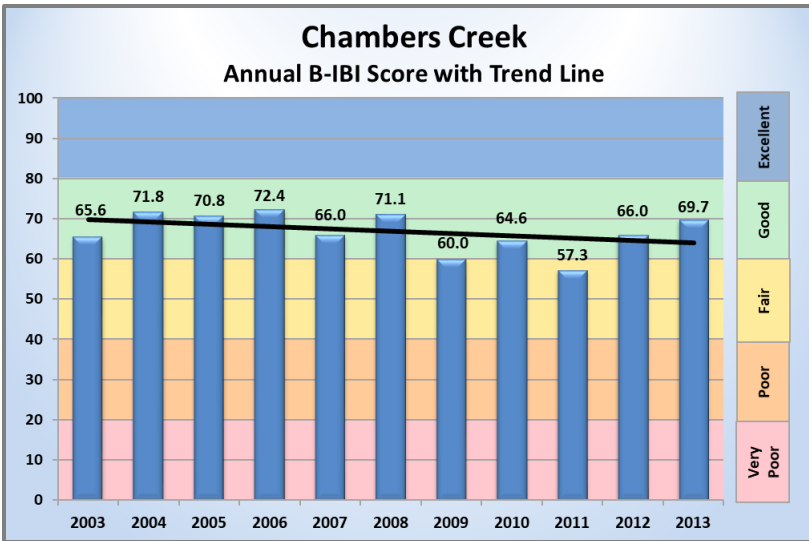
The Chambers basin is 8,154 acres, ranging in elevation from 110 to 320 feet above sea level, and spans from the north end of Chambers Lake to Chambers Creek at the basin's southern end. Hills and kettles are found in the northeast corner of the basin. The remaining basin areas are primarily level prairies. Most of these kettles contain lakes that are groundwater fed with no natural inlets or outlets. Slopes

generally range from 0 to 3 percent, with few steep slopes except around the kettles.

The Chambers/Little Chambers Lake complex is 121 acres making it the largest waterbody in the Basin. The construction of the Chehalis-Western railroad, completed in 1927, divided Chambers Lake into two lakes separated by a narrow 500 foot long channel. The western side of Chambers Lake is mostly within the City limits and is approximately 63 acres with a maximum depth of 5 feet. Little Chambers Lake is not within the City limits. Shallow aquifers lie underneath and surround the lakes.

Chambers Ditch flows south through the northern Chambers basin for approximately 2.5 miles starting from the southern end of Little Chambers Lake to Chambers Creek's south tributary near Rich Rd. With the exception of the first 200 feet. at Little Chambers Lake, the ditch's initial 0.6 miles are within the City limits. The remainder of the ditch is inside the Urban Growth Area. Eventually, Chambers Creek drains into the Deschutes River south of Hewitt Lake.





Source: Puget Sound Benthos website (<http://pugetsoundstreambenthos.org>)

### Key Basin Statistics

Total Basin = 8,154 acres

Basin in City = 1,388.7 acres

Chambers Lake = 74.7 acres

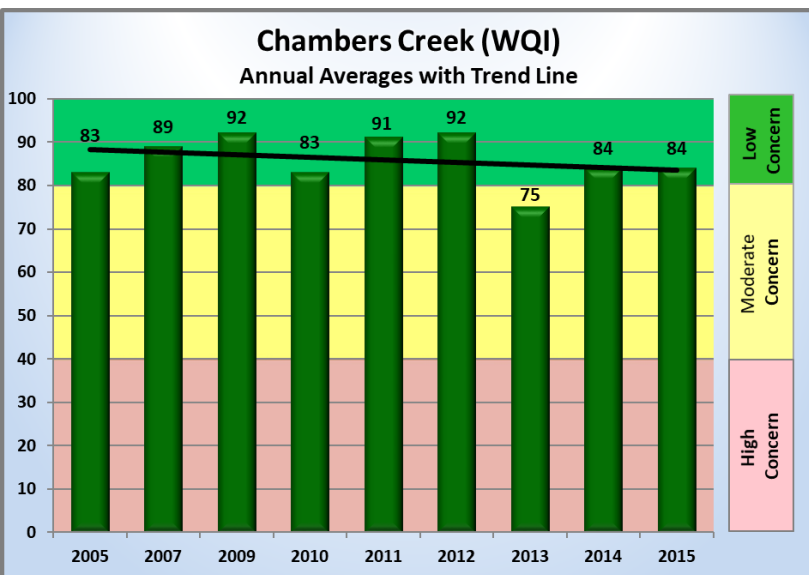
Chambers Lake in City = 58.7 acres

Wetlands in City = 177.4 acres

Chambers Creek (Ditch) in City = 0.6 miles

City Impervious = 243.8 acres

City Treated Impervious = 168.9 acres

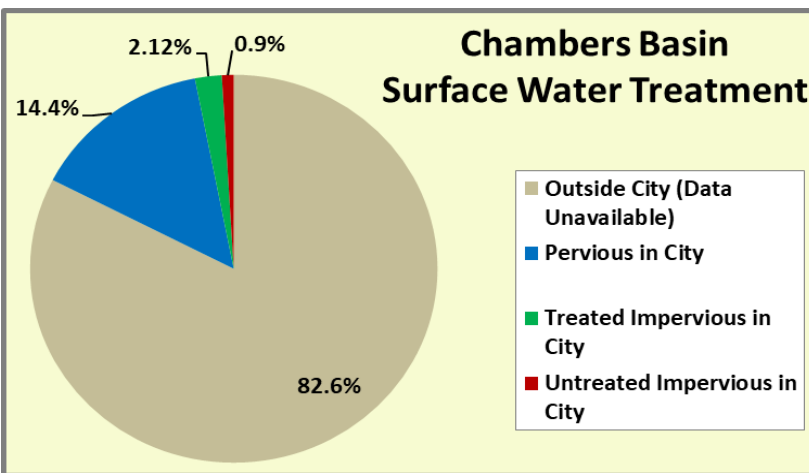


Source: Thurston County Public Health and Social Services, 2016.  
<http://www.co.thurston.wa.us/health/ehrp/annualreport.html>

### Basin Concerns

Chambers Basin is not on Ecology's 303 (d) list of impaired water bodies. However, there are concerns due to high nitrate and total phosphorus concentrations. These high concentrations are likely due to impacted groundwater.

(Thurston County Water Resources Monitoring report, 2016).



Source: City of Olympia, Olypia\_basemap.DBO.Topo\_HardSurface, 2015.

