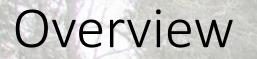
Deschutes Watershed Land Use Analysis

Work Group Meeting #2
Management Tools

Allison Osterberg
Charissa Waters

Thurston County Resource Stewardship





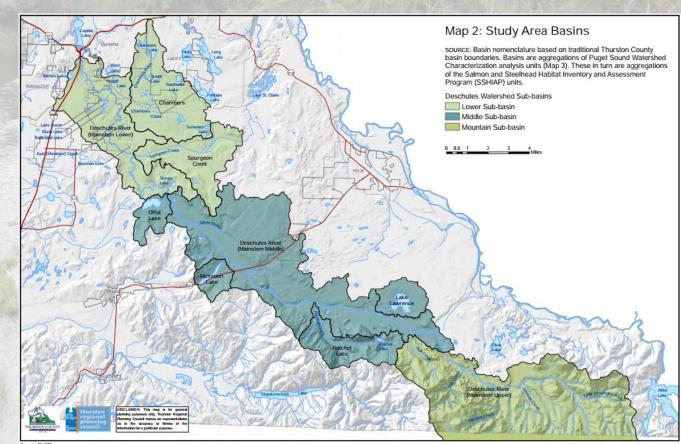
- Ground Rules
- Review of Deschutes Current Conditions and Risks
- Tools to Address Concerns
 - Regulatory
 - Voluntary



Deschutes Current Conditions

- Threats and Issues
 - Water Quality
 - Temperature, bacteria, sediment, nutrients

- Future conditions
 - Population
 - Impervious surfaces
- Wells
- Septic systems
- Farms
- Forest cover



Deschutes Future Conditions

• What management tools can we use to affect the future of the

Deschutes watershed?

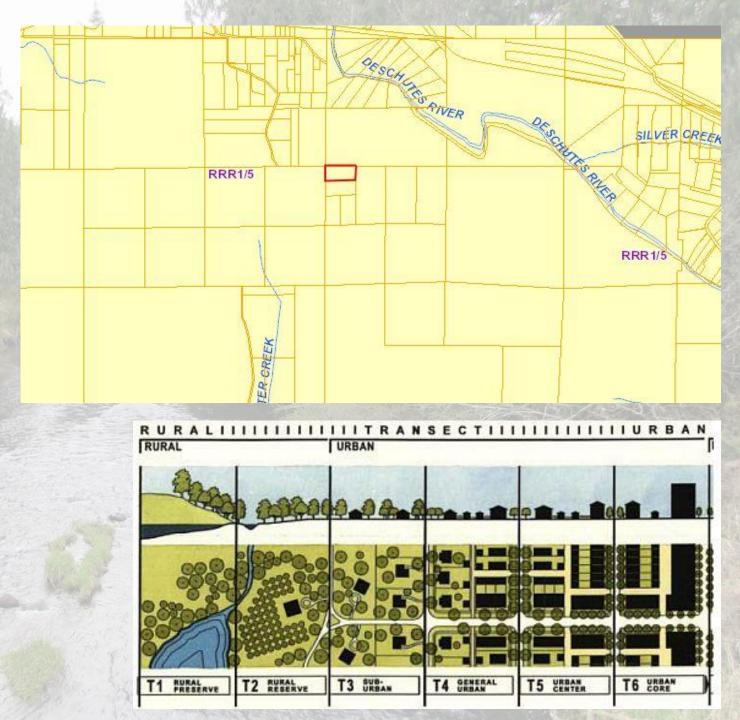
Regulatory tools

Voluntary tools



Zoning & Density

- Zoning regulations determine how individual parcels of land can be used
- Criteria set in County's Comprehensive Plan
- Density = dwelling units/acre
- Rural zoning is generally anything < 1 unit/5 acres
- Lower density zoning generally more protective



Critical Area Protections

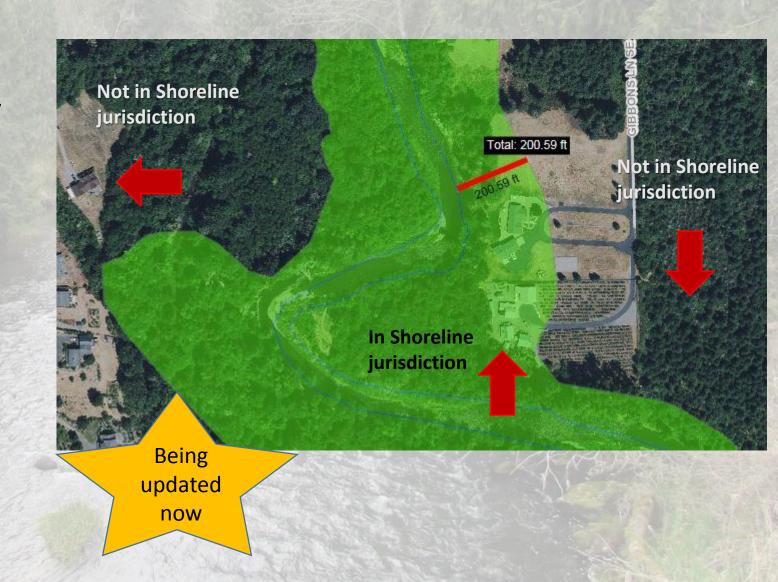
- Part of Comprehensive Plan
- CAO updated in 2012
- Critical Areas
 - Fish & wildlife habitat areas
 - Wetlands
 - Critical aquifer recharge areas
 - Frequently flooded areas
 - Geologically hazardous areas (steep slopes)

Freshwater Riparian Habitat Area	Type S (Deschutes) = 250 ft Type F (Spurgeon, Silver, Reichel) = 150-250 ft
Wetland Buffers	50-300 ft



Shoreline Management

- Concerns area 200 feet landward of the Ordinary High Water Mark
 - Rivers over 20 cfs annual flow & floodway
 - Lakes 20 acres and larger
 - Associated wetlands
- Most of Deschutes Study Area in "Conservancy"
 - 100 ft setback
- Some lakes in "Rural"
 - 50 ft setback; 20 ft buffer



Forest Practices

- Class II, III → DNR Forest Practices
 - Logging areas that will NOT be converted to another use*
 - Managed under State Forest Practices Act; Forests and Fish Law
 - Not subject to Critical Area Ordinance
- Class IV
 - Logging area that will be developed
 - North County UGAs: area > 5,000 sq ft
 - Rural: 5,000 board feet
 - Subject to Critical Areas Ordinance
 - In Urban Growth Areas, 5% tree tract required



Development Regulations

- Impervious Surface Limits
 - Set within zoning or overlay districts
 - Typical use on 5-acre parcel = 5%
 - Current limit RRR1/5, R1/10, R1/20 = 60%
- Tree Preservation
 - No specific requirements outside of critical area protections or forest practices
- Regulations only affect <u>new</u> development



Septic Systems

- Septic systems can fail
 - Surveys from Henderson, Nisqually, Eld Inlet, Summit Lake
 - 14-33% failure rate
- Time of Transfer
 - Septic systems must be inspected and repaired when property is sold
- Operation & Maintenance
 - Voluntary programs: 30% participation rate
 - Henderson Inlet, mandatory: after 5 years, 3% failure rate



Sewer

- GMA: urban services, like sewer lines not allowed outside urban boundaries
- Rainier
 - Groundwater contamination concerns
 - Sewer line would allow/encourage more dense development
 - Commercial
 - Residential



Stormwater

- County-wide stormwater utility
- New development must meet state-regulated standards

- Stormwater retrofits
 - Provide treatment or flow control for older development
 - Constructed wetlands
 - Bioretention swales







