



# WOODARD CREEK BASIN

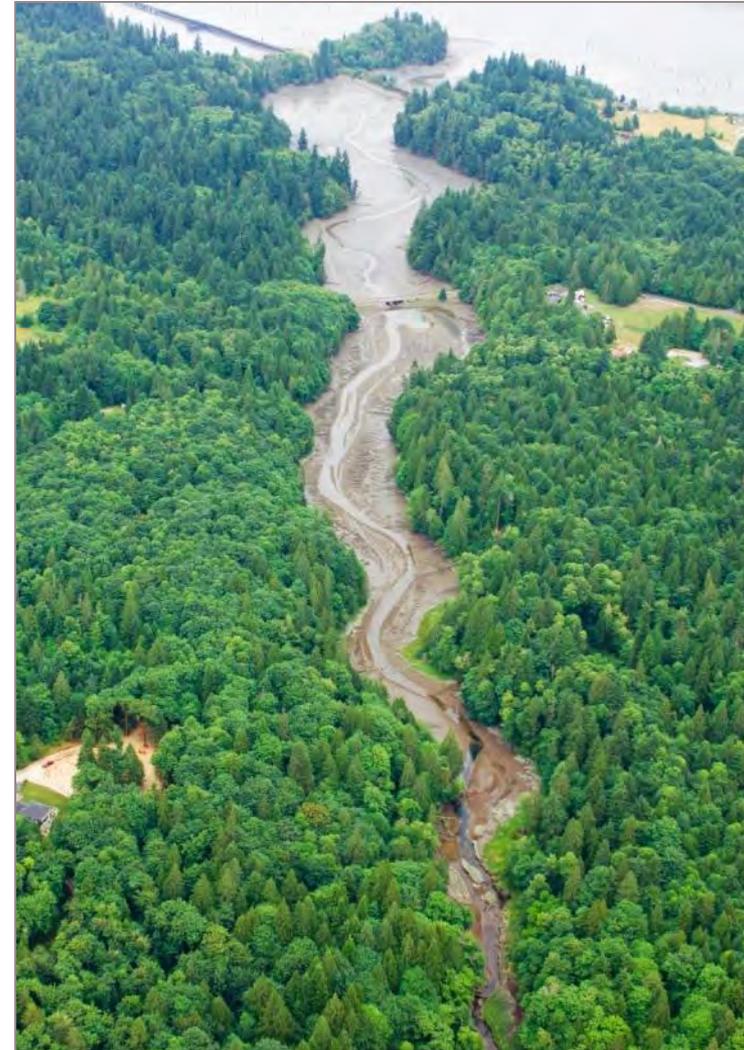
# COMMUNITY WATERSHED WORKSHOP

Thurston County Long-Range Planning & TRPC

October 22, 2014

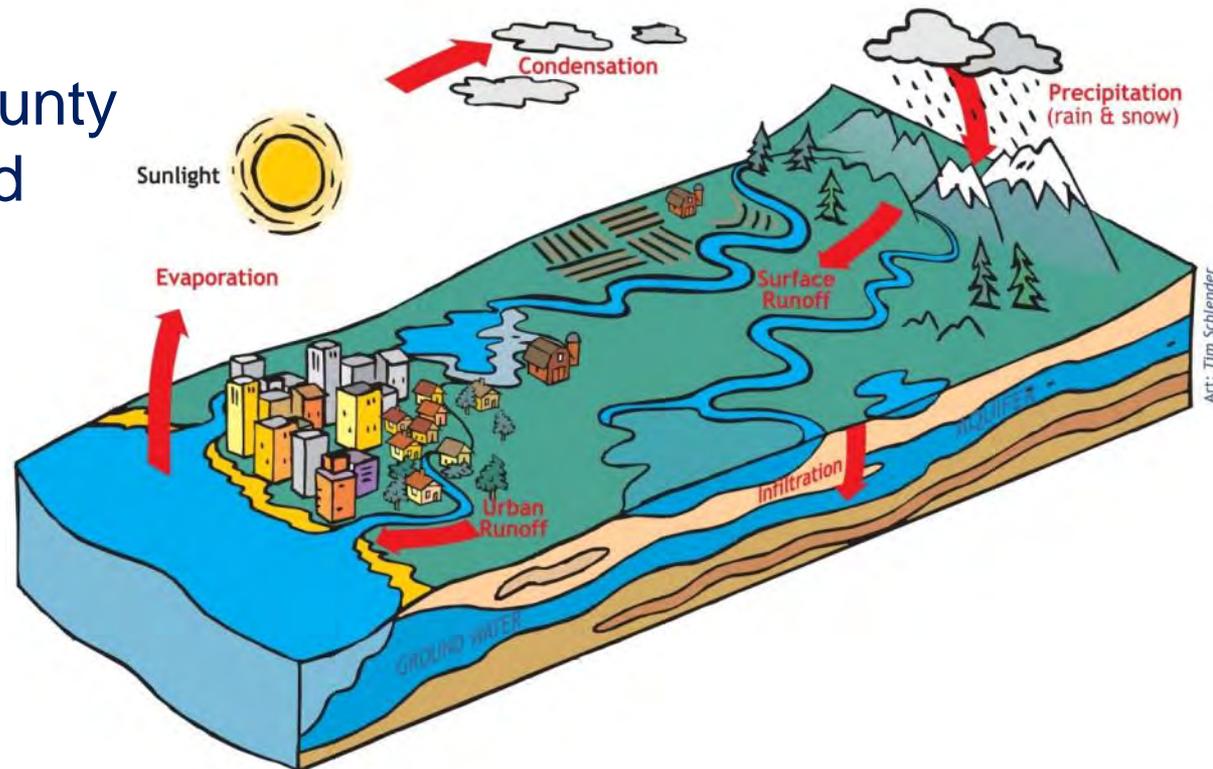
# Tonight's Agenda

- Welcome
- *Presentation: Guiding Growth – Healthy Watersheds Project*
  - Background
  - Alternative Land Use Scenarios
  - Next Steps
- Table Discussions



# Guiding Growth – Healthy Watersheds Project Background

- Thurston County is one of the fastest growing in Western Washington – How do we best protect water resources as our region grows?
- 2009: Thurston County and TRPC received a grant from EPA to conduct watershed-based planning



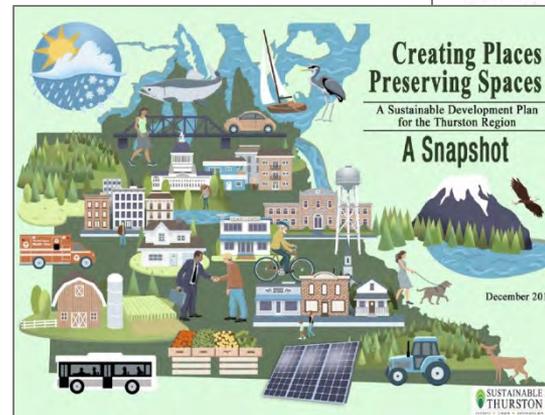
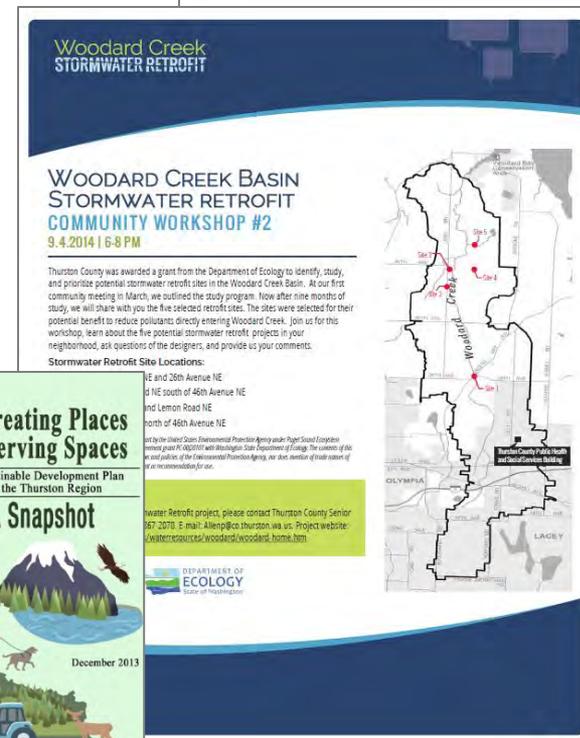
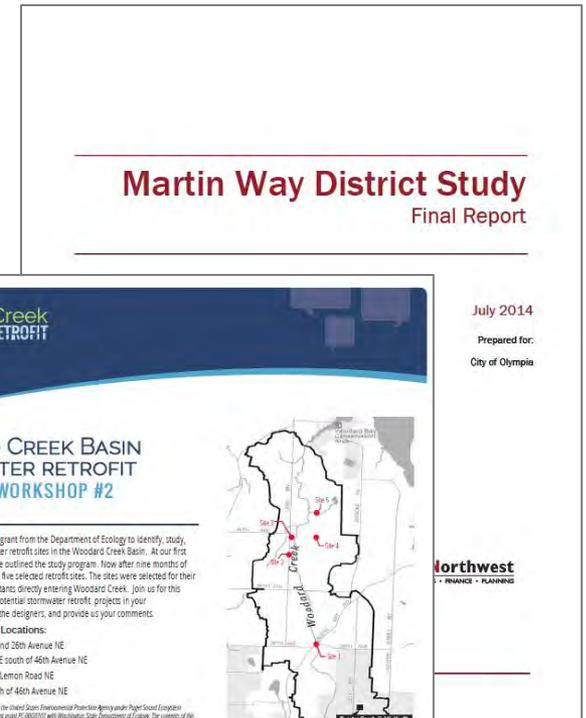
# Guiding Growth – Healthy Watersheds

## Project Background

- Assessed current conditions for 69 basins
- April 2013: Selected 3 basins for focus
  - McLane Creek (October 9 workshop)
  - **Woodard Creek**
  - Black Lake (October 30 workshop)
- 2013/2014: Gathered information and conducted analyses on each basin
- Now: Developing recommendations for future management

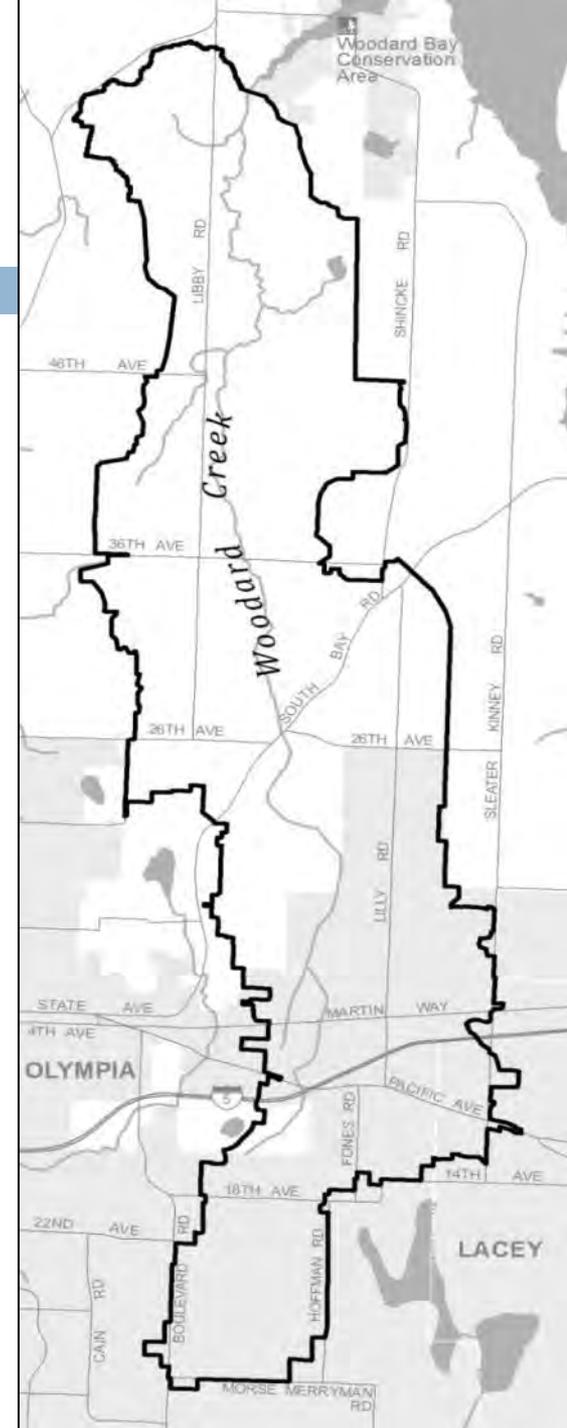
# Guiding Growth – Healthy Watersheds Related Projects

- Sustainable Thurston
- Martin Way District Study
- Woodard Creek Basin Stormwater Retrofit Study



# Where is the Woodard Creek Basin?

- ~ 5,000 acres
- Woodard Creek originates in Fones Rd wetland and discharges at Woodard Bay Conservation Area
- Jurisdiction
  - Thurston County
  - City of Olympia
  - City of Lacey (small area)
- Within the Henderson Inlet Shellfish Protection District



# What is the current condition of Woodard Creek Basin?

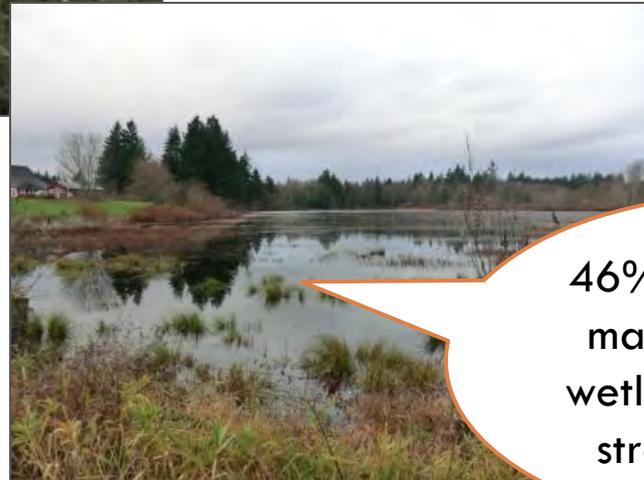


15% Total  
Impervious  
Surfaces



**Water Quality Ranking:** *Fair*

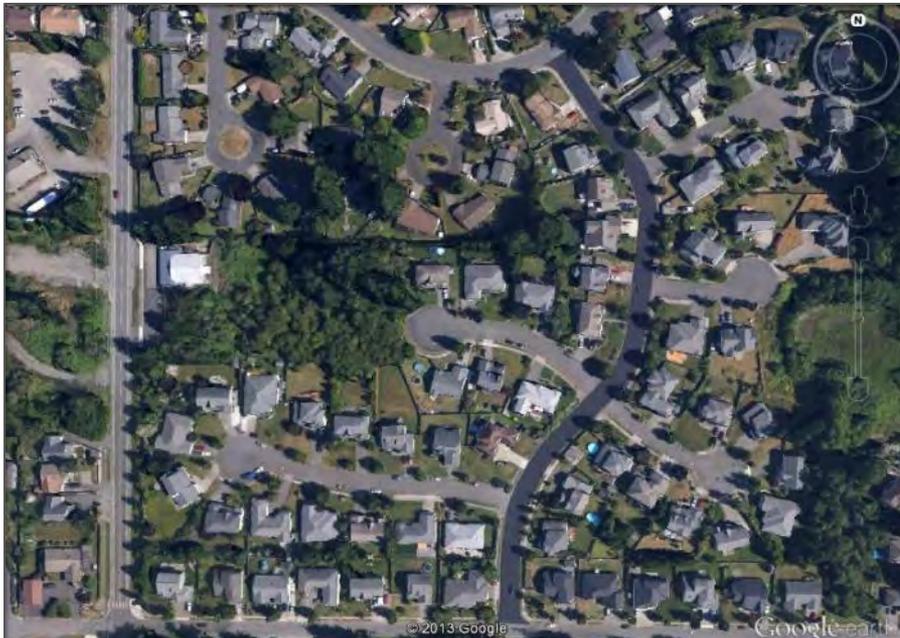
Fails fecal coliform standard  
Elevated nitrite and phosphorus  
levels



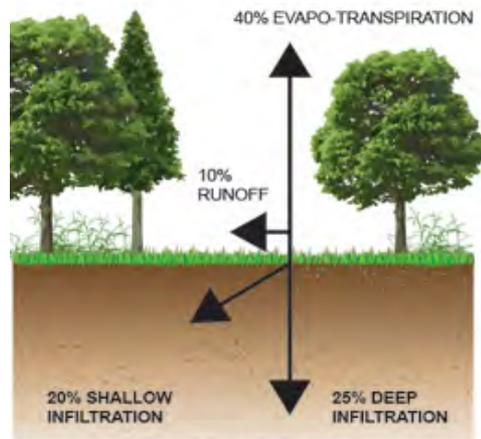
46% Tree Canopy;  
many unmodified  
wetlands and intact  
stream corridors

# What are the water resource concerns in Woodard Creek Basin?

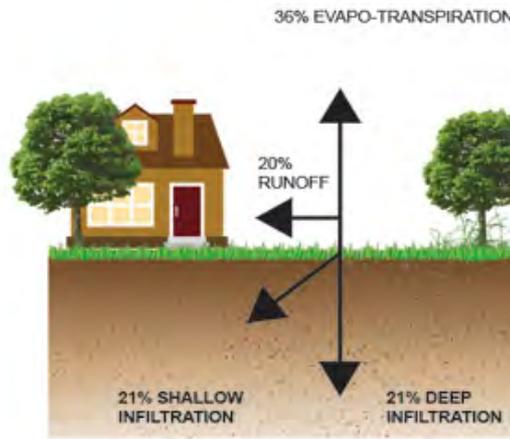
- Population growth & future development
- Water flow and quality
- Riparian corridors & tree cover



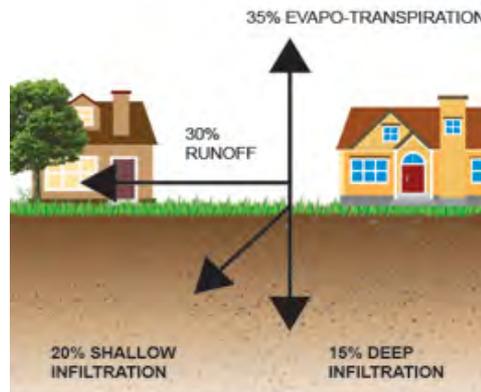
# How will future development affect Woodard Creek Basin?



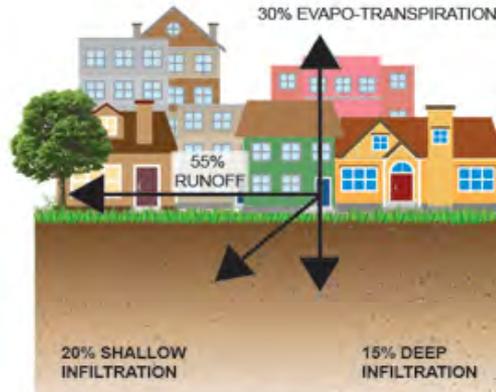
NATURAL GROUND COVER



10-20% IMPERVIOUS SURFACE



35-50% IMPERVIOUS SURFACE



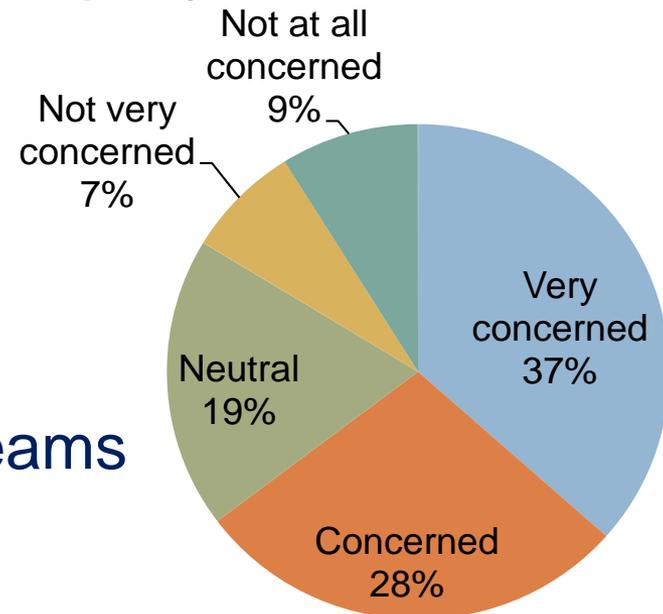
75-100% IMPERVIOUS SURFACE

SOURCE: (GUIDANCE SPECIFYING MANAGEMENT MEASURES FOR SOURCES OF NONPOINT SOURCE POLLUTION IN COASTAL WATERS, 1993) AS SHOWN IN (ARNOLD, 1996).

# Public Outreach

- Summer 2013: Public survey sent by mail
- March 2014: Community Workshop
- High level of concern about water quality
- **Important:**
  - Clean drinking water
  - Puget Sound WQ
  - Healthy salmon runs
  - Private property rights
  - Swimmable lakes and streams

**How concerned are you about water quality in Woodard Creek Basin?**



# Public Outreach

- Key Themes and Values
  - Preserving open space and natural areas
  - Protecting water quality and habitat for wildlife
  - Managed growth that maintains rural areas
  
- How would you hope to describe the Woodard Creek basin in thirty years?
  - Much the same as it is today, or improved



# Woodard Creek Basin: *Draft* Goals

- Maintain basin-wide ecological functions
- Protect (and improve) water quality
- Protect habitat for fish and wildlife
- Restore stream and shoreline functions where degraded
- Encourage sustainable development (and redevelopment) within the urban corridor



# Alternative Land Use Scenarios

## 1. **Historic Conditions**

- ▣ Forested, with some prairie and wetlands

## 2. **Current Conditions**

- ▣ Current development, impervious surfaces, and stormwater

## 3. **Planned Future Trend**

- ▣ Current regulations carried out into the future

## 4. **Alternative Futures**

- ▣ Changes to land use and development regulations
- ▣ Restoration of riparian areas and wetlands
- ▣ Stormwater retrofits for older development

# Alternative Land Use Scenarios

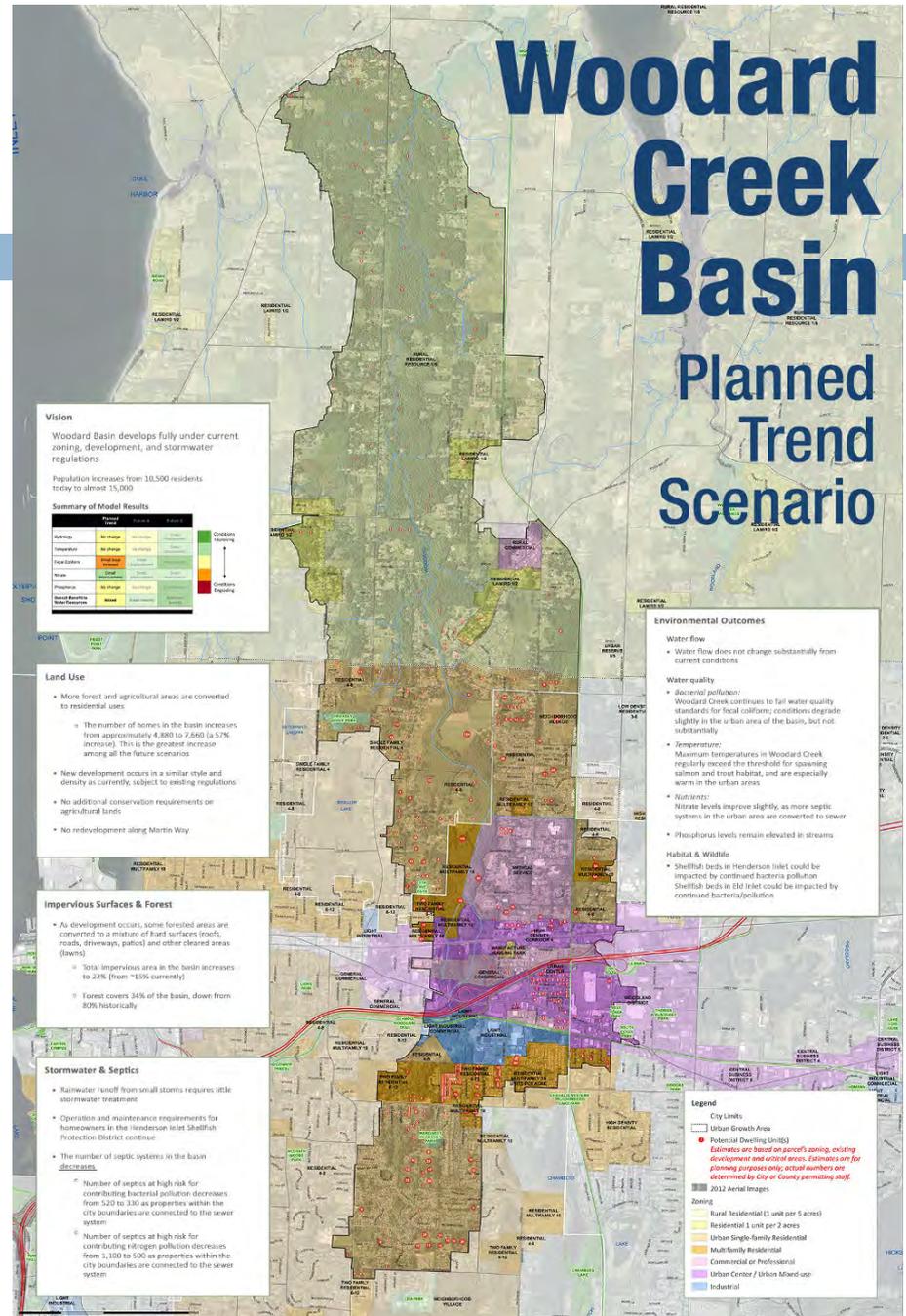
- Historic → Current
  - More than 40% forest cover lost
  - Some loss of wetland areas
  - Changes from historic to current conditions greater than from future growth



# Planned Trend Scenario

## VISION

Woodard Creek Basin develops fully under current zoning, development, and stormwater regulations



# Planned Trend Scenario: Outcomes

## □ Land Use

- More forest and agricultural areas are converted to residential
  - ~2,780 additional dwelling units
  - Total impervious area in the basin increases to 22%
  - Fewer septics in higher risk areas as sewer lines are extended to urban areas

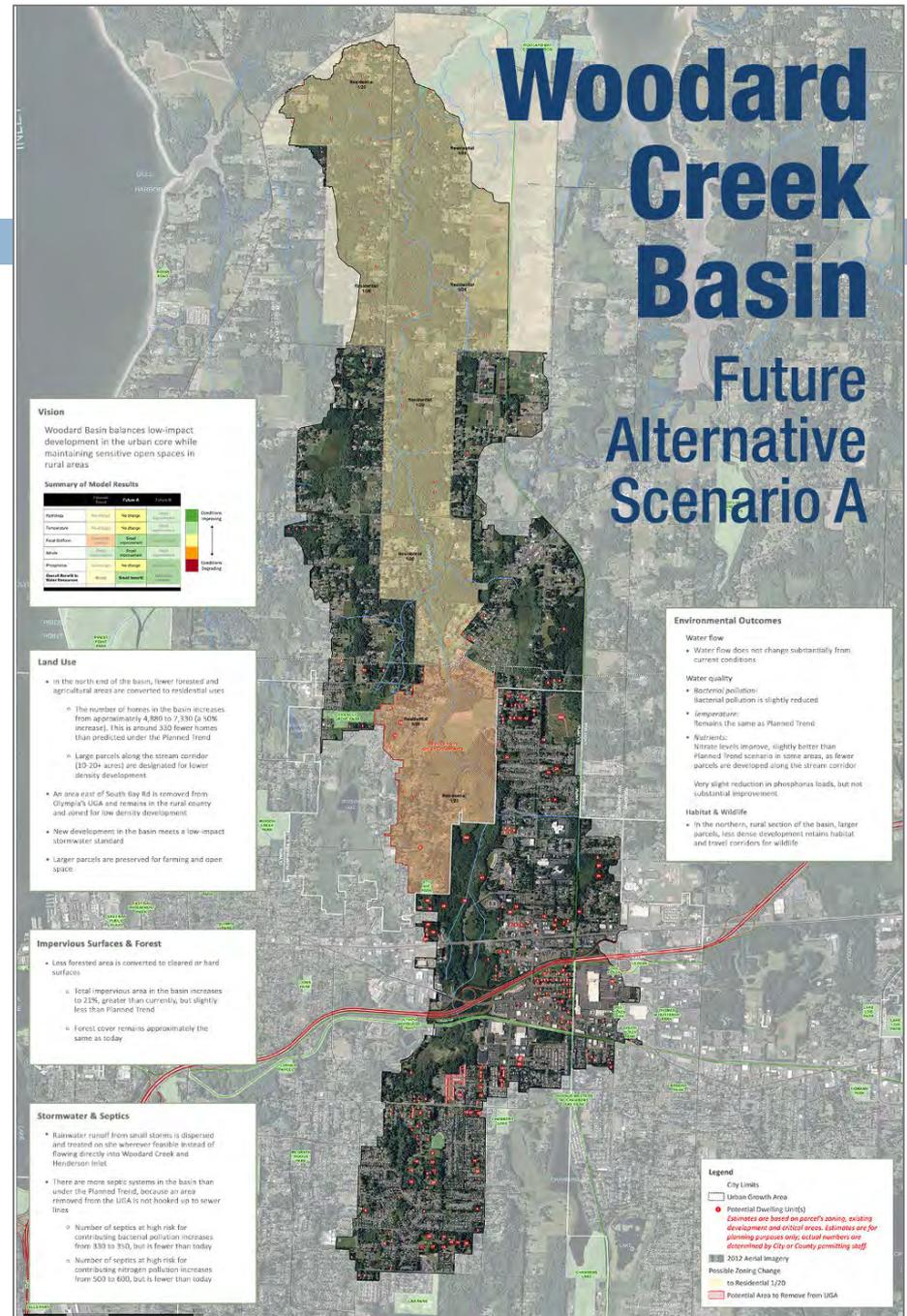
## □ Environmental Outcomes

- Stream temperatures sometimes exceed threshold for salmon habitat
- Bacteria levels in streams remain elevated and get worse in some areas
- Nitrate levels improve, as more homes are connected to sewer
- Habitat is fragmented by development

# Future Alternative A Scenario

## VISION

Woodard Creek Basin balances low-impact development in the urban core while maintaining sensitive open spaces in rural areas.



# Future Alternative A: Outcomes

## □ Land Use

- In the north end of the basin, fewer forest and agricultural areas are converted to residential
  - ~2,450 additional dwelling units (330 less than Planned Trend)
  - Undeveloped parcels along stream corridor zoned at lower density
  - Area removed from Olympia UGA (~200 homes)
  - Number of septics increases from Planned Trend

## □ Environmental Outcomes

- Stream temperatures and water flow remain the same as current
- Bacteria and nitrate levels reduced in some areas

# Future Alternative B Scenario

## VISION

Woodard Creek Basin is a model for restoration through incentives and investments in habitat conservation and stormwater infrastructure.



# Future Alternative B: Outcomes

## □ Land Use

- Undeveloped parcels preserved through incentive programs, purchase of development rights
- Vegetation along streams restored
- Some wetland areas restored
- Area along Martin and Pacific Way redevelops with improved amenities and stormwater treatment
- Education and outreach increased

## □ Environmental Outcomes

- Total impervious area reduced from Planned Trend and A; Total forest cover increases slightly
- Stream temperatures slightly reduced
- Bacteria and nutrient levels improve

# Guiding Growth – Healthy Watersheds

## Next Steps

- Preferred Recommendations

*can include one of the future alternatives, mix and match from all three, or list new alternatives*

- Final Report – Winter 2015

- Public comment period
- Planning Commission
- Board of County Commissioners



# Guiding Growth – Healthy Watersheds

## Next Steps

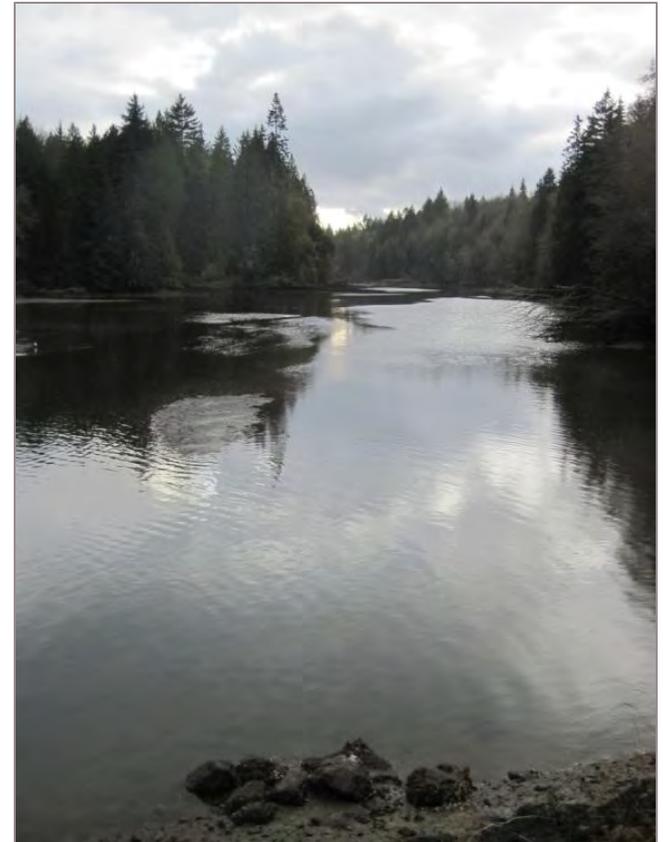
- Tonight
  - Question & Answers
  - Break for Table Discussions
  - Dot voting



# Guiding Growth – Healthy Watersheds

## Table Discussion Questions

- What goals and strategies are the most important to include in a final list of recommendations?
- What features would you want to see included in a final plan?  
Which would concern you?
- What could be added?



# Guiding Growth – Healthy Watersheds

## Contact

*Questions? Comments?*

### Contact:

Allison Osterberg  
Associate Planner  
Thurston County  
(360) 754-3355 x7011  
[osterba@co.thurston.wa.us](mailto:osterba@co.thurston.wa.us)



This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement (PO - 00J12401-0) to Thurston County. The contents do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.