

**CHEHALIS BASIN PARTNERSHIP
 Chehalis Tribe “Lucky Eagle” Casino
 Rochester, Washington
 September 23, 2011
 9:30 a.m.
 Meeting Summary**

MEMBERS, ALTERNATES & GUESTS PRESENT

| | |
|--|---|
| Art Lehman, Port of Centralia | Janel Spaulding, Chehalis Basin Partnership |
| Bob Burkle, WA Dept. of Fish and Wildlife | Jim Hill, Lewis County Citizen |
| Chanele Holbrook-Shaw, Thurston County Citizen | Julie Balmelli-Powe, Lewis County Farm Bureau |
| Chris Hempleman, WA Dept. of Ecology | Lee Napier, Grays Harbor County |
| Chris Stearns, Thurston County PUD | Lyle Hojem, Lewis County Citizen |
| Chuck Caldwell, Port of Grays Harbor | Mark Swartout, Thurston County |
| Chuck Turley, WA Dept. of Natural Resources | Bonnie Canaday, City of Centralia |
| Bill Schulte, Lewis County | Patrick Wiltzius, City of Chehalis |
| Karen Valenzuela, Thurston County | John Lucas, Lewis County Farm Bureau |
| Terry Willis, Grays Harbor County | Nelson Majano, BASES Environmental Consulting |
| Don Loft, The Evergreen State College | Chris Holcomb, BASES Environmental Consulting |
| Dave Vasilauskas, City of Chehalis | Aaron Litwak, BASES Environmental Consulting |

SUMMARY OF ACTION ITEMS:

| | |
|--|---|
| Approval of Meeting Summary | The meeting minutes from May, June, and July were approved by a quorum of 10 members. |
| CBP Organizational Structure Discussion | The Partnership agreed to send out the internal fundraising letter (as presented) to all members, as soon as possible. |
| CBP Quarterly Progress Report and Budget Update | The Partnership thought the format of the quarterly progress report and budget update was helpful. This format will be presented quarterly to the Partnership. Also, a request to approve vouchers for the Watershed Coordinators time was suggested and is being prepared for the end of the coming quarter (Jul-Sep). It will be presented to the Partnership at their October meeting. |

GENERAL PARTNERSHIP BUSINESS

Discuss May, June, and July 2011 Meeting Summaries

The May, June, and July minutes were discussed and approved by a quorum of 10 members: Lewis County, Thurston County, Grays Harbor County, Centralia, Chehalis, Port of Grays Harbor, Port of Centralia, Lewis County Farm Bureau, Citizen representatives, and State government representatives.

Mason County Commissioner Jerry Lingle

It is with great sadness that Mason County Commissioner and CBP rep Jerry Lingle passed away in August.

Cost of September Meeting Space

Thank you to Thurston County for covering the cost of the meeting space for this meeting.

MEETING AGENDA

1) Fundraising Letter Follow-Up

The Chehalis Basin Partnership sent out their fundraising request letter to members in August, signed by Chair and Vice Chair. Janel Spaulding reported she heard feedback from Thurston PUD about their interest in making a contribution, but wanted to become a member first. Janel will follow up with Commissioner Chris Stearns to work on producing the necessary documentation for consideration as a member of the CBP. The CBP will review the information at the October meeting and make a decision on Thurston PUD's membership. Thurston PUD might replace one of the water purveyor members or might become a new member under the water purveyors or another interest group.

Grays Harbor Port Commissioner Chuck Caldwell also expressed interest in making a contribution to the CBP in the form of meeting space at the Port. The group discussed meeting space locations since there is no funding to continue to pay for meeting space at the Casino. Thurston County and Lewis County both offered meeting spaces in addition to the Port. The group likes the central location of the Casino and recommended looking into Thurston County's meeting space as a central location for most people. Janel will work with Mark Swartout and Commissioner Karen Valenzuela to find a meeting space at Thurston County. If the group decides Thurston County is a central location future meetings will be held there.

No other feedback/follow-up was given by members in regards to fundraising. The CBP will continue the fundraising discussion at their October meeting.

2) Watershed Coordinator Quarterly Report and Expense Report at October Meeting

Janel Spaulding will present a quarterly progress report and budget update at the October meeting. She asked the group for clarification on what they would like to approve for expenses. Grays Harbor College sends the Watershed Coordinator's invoice to Grays Harbor County at the end of each quarter for payment/reimbursement. Some members expressed an interest in reviewing the invoice/voucher from the College so the County will give a batch of invoices/vouchers for the CBP to review/approve. However, this batch of invoices will include other items not related to the CBP or the Watershed Coordinator. The CBP will have an opportunity to review and approve the voucher at their October meeting.

3) Watershed Festival Re-Cap

Janel Spaulding showed a powerpoint presentation on the 6th Annual Chehalis Watershed Festival, held Saturday, September 17th, 2011 at Morrison Park and Rotary Log Pavilion in Aberdeen. This was another great event attended by the Chehalis Watershed Community. Thank you to the volunteers who helped staff the CBP table: Kahle Jennings, Lee Napier, Victor and Margarita Villegas, Ron, Kim and Jarred Figlar-Barnes. City of Centralia took home the trophy for the 3rd for having the best tasting water in the Chehalis Basin at the 4th Annual Chehalis Basin Drinking Water Taste Test. Followed closely in 2nd place was Chehalis, then Montesano, and Bottled Water. The Chehalis Tribe once again provided delicious salmon baked in a traditional style, the Task Force provided a Trout Fishing Pond, and Who Are These Guys played old time swing and jazz music. There were a wide range of exhibitors each with a unique hands-on activity for kids.

As in years past, the funding for the festival came solely from local community organizations and government. This year approximately \$3,000 was raised to put on the Festival. A huge thank you goes to all of the sponsors, exhibitors, and volunteers who supported and participated in the Festival.

4) Drops of Water Update

Margaret and a small group have been working really hard to change the format of DOW and now they have! DOW is now a fully online newsletter (no more print copies). The new website is www.dropsofwater.net. You can go here to find out the latest articles as well as previous articles, volunteer events, photos, and other information. Margaret also set it up so people could “subscribe” to the newsletter so you’ll receive email updates when we get the new bi-monthly newsletter articles on the website. You can subscribe on the home page at the bottom of the screen. Janel also distributed a handout with more information about the new format.

5) Chehalis Basin Water Quality Improvements

Janel emailed the CBP with a press release and article from the EPA about a recent water quality success story in the Chehalis Basin. Two segments of the 93 were removed in 2008 from the impaired waters list 303(d) listing for fecal coliform and they expect another 76 to be removed in 2012. This achievement is no small success and should be celebrated by all who have been involved (see handout for partners). This is another great example that shows if we all continue to work together we can make a difference and benefit our watershed.

6) BASES Presentation

Even though there has been significant improvement in fecal coliform reductions in the basin there is still work that can be done to make the water even better for us and for fish and wildlife. BASES environmental group wanted to talk with us today about their proposal for an update to the State of the River Report as a possible Centennial Clean Water grant. There have been two state of the river reports starting in 2006 and the last update was in 2009. The first report was primarily completed by Randy Lehr of Grays Harbor College and the last update was completed by Don Loft and Joel Green. Don and his group BASES are interested in updating the State of the River Report again to see if other segments could be removed that need further monitoring first. These reports have been helpful in Ecology’s decision to remove segments from the 303(d) listing but the last State of the River report showed there is still more work to be done. BASES presented their proposal to the WQ Committee last month and members agreed it would be another great project and suggested it come to the CBP for suggestions and ideas.

Powerpoint presentation of BASES proposal is attached at the end of the minutes.

Agenda Items for October 28, 2011 Meeting and Future Meetings.

The October Partnership meeting agenda will consist of:

- Fundraising Letter Continued Discussion
- CBP Quarterly Progress Report
- CBP Work Plan 2012
- Thurston PUD’s Membership in CBP
- Monthly organizational presentation-Grays Harbor Marine Resources Committee
- Informational presentation-Importance of Floodplains

ADJOURNMENT

With there being no further business, Chair Canaday adjourned the meeting.



Introduction: Chris Holcomb

2011 Proposal: Don Loft

State-Of-The-River Report
for
The Chehalis River Basin

Proposal for a 2011 Update

8/11/2011

State-Of-The-River Report (SRR) 2006-2009

STATE-OF-THE-RIVER REPORT

FOR

THE CHEHALIS RIVER BASIN

2006 - 2009

A Water Quality Study

Joel Green, Ph.D.
Don Loft, B.A.
Randy Lehr, Ph.D.

Grays Harbor College
1620 Edward P. Smith Drive
Aberdeen, WA 98520

Contributors:

Chehalis Basin Partnership, Confederated Tribes of the Chehalis Reservation and Washington
State Department of Ecology

Funded by:

Washington State Department of Ecology, Grays Harbor College and the Confederated Tribes of
the Chehalis Reservation

September 14, 2009

- Joel Green
- Don Loft
- Randy Lehr
- Stakeholders
 - Chehalis Basin Partnership
 - Confederated Tribes of the Chehalis Reservation
 - WA Dept. of Ecology
 - Grays Harbor College

Dept. of Ecology TMDL Report



**Upper Chehalis River Watershed
Multi-Parameter
Total Maximum Daily Load**

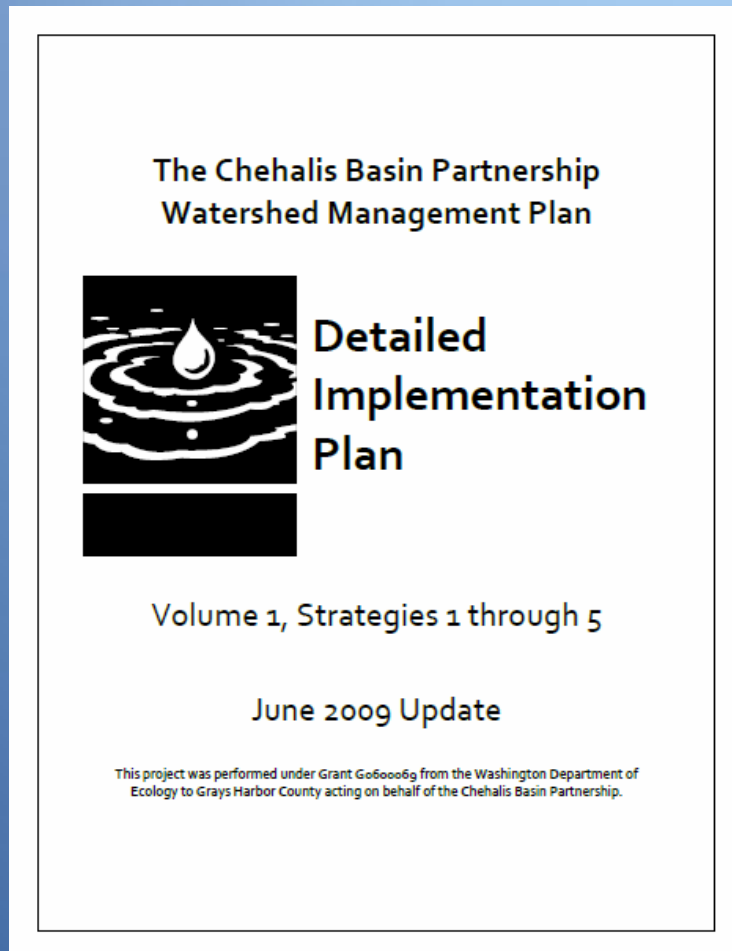
Water Quality Data Review



November 2010
Publication No. 10-03-057

- Scott Collyard & Markus Von Prause
- November 2010
- SRR Report Cited 5 Times

Watershed Management Plan (WMP)

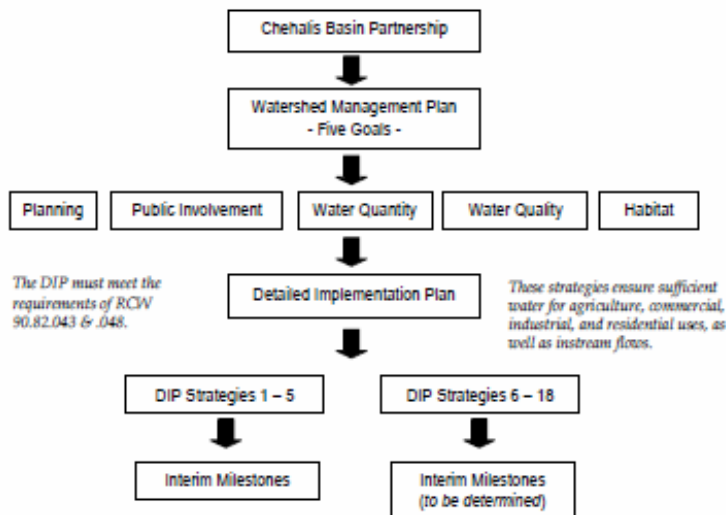


- Strategies 1-5
- Strategy #2
 - Interim Milestone 2.4

“Develop a watershed management work plan that will develop prioritized project lists that tie specific water quality, quantity, and habitat projects to funding opportunities”

Detailed Implementation Plan (DIP)

Figure 1. Organizational Layout of the WMP and the DIP



- DIP Five Goals
 - Planning
 - Public Involvement
 - Water Quantity
 - Water Quality
 - Habitat
- SRR Update
 - Water Quality

EPA Report



Section 319 NONPOINT SOURCE PROGRAM SUCCESS STORY

Washington

Watershed-wide Implementation of Management Practices Restores River

Waterbody Improved Fecal coliform (FC) bacteria from agricultural runoff and leaking septic systems impaired shellfish harvesting and primary contact recreation uses in the Chehalis River watershed. As a result, the Washington Department of Ecology (Ecology) added 93 segments of the Chehalis River to the state's Clean Water Act (CWA) section 303(d) list of impaired waters between 1996 and 2004. To address the problems, farmers installed numerous agricultural best management practices (BMPs), and local governments increased efforts to identify and upgrade septic systems. FC levels decreased across the watershed. Ecology removed two segments from Washington's impaired waters list in 2008. Data show that another 76 segments are consistently meeting FC water quality standards; Ecology expects to propose removing those segments from the impaired waters list in 2012.

Problem

The Chehalis River drains approximately 2,660 square miles on the coast of Washington and empties into Grays Harbor, an important shellfish area (Figure 1). More than 80 percent of the watershed is forested with another 10 percent dedicated to agriculture. Developed and agricultural areas are concentrated in areas close to waterways.

The applicable water quality standard (primary contact recreation use) requires that FC not exceed a geometric mean of 100 colonies (col) per 100 milliliters (mL), and that no more than 10 percent of all samples be greater than 200 col/100 mL. Water quality monitoring in 1990s indicated that numerous segments in the upper and lower Chehalis River Basin violated water quality standards for FC. As a result, Ecology added a total of 93 segments in the upper and lower Chehalis River to the state's CWA section 303(d) list for bacteria impairment in 1996, 1998 and 2004.

Ecology developed total maximum daily loads (TMDLs) for FC for Grays Harbor/Chehalis River in 2002 and for the upper Chehalis River in 2004. The TMDL assessments found that most of the Chehalis River's FC load originates in the upper watershed and that the FC sources in the upper watershed are nearly all nonpoint in origin. Primary FC sources of concern are animal waste from livestock operations and livestock stream access, agricultural and stormwater runoff and untreated human sewage from failing residential and commercial septic systems. Existing FC permit limits for sewage treatment plant discharges met

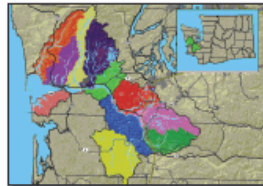


Figure 1. The Chehalis River drains approximately 2,660 square miles in Washington. Colors indicated different subbasins within the Chehalis River watershed.

TMDL requirements. To prioritize projects, local partners and Ecology developed a comprehensive water quality implementation plan in 2004.

Project Highlights

Beginning in 1999, a statewide law required that all dairy farmers develop and implement nutrient management plans. In 2004 partners developed a TMDL implementation plan to help focus BMP implementation efforts. Since then, agricultural landowners have implemented drainage management on more than 100 acres, improved livestock waste storage and transfer systems, planted/fenced 56 miles of shoreline, and installed livestock exclusion/control fencing and alternative water systems (including 2,500 feet of livestock

pipeline and three livestock watering troughs). They implemented prescribed grazing on almost 200 acres and created management plans for nutrients (covering 6,700 acres) and pests (1,061 acres).

Forest landowners improved stability of forest roads (16,241 feet), seeded and mulched 15 acres of critical area, installed 135 feet of streambank and shoreline protection, and improved 371 acres of stream habitat. Stakeholders also improved wetland habitat by installing fencing (10,949 feet), restoring wetland areas (1,137 acres) and implementing 600 acres of wetland wildlife habitat management. More than 4,800 acres of land have been placed into perpetual conservation easements in the upper basin. The Chehalis Confederated Tribes installed numerous riparian planting and fencing projects on reservation land and in partnership with many nontribal public and private landowners. Recent grants have enabled the Chehalis Basin Partnership to expand its water quality sampling program and increase its focus on community outreach and education.

Local agencies have worked to reduce sewage-related pollution. Thurston and Lewis County Health Departments offered septic system maintenance trainings and offered low-interest loans for repair or replacements. Local governments upgraded seven treatment plants and built two new plants in Centralia and Chehalis to ensure continued compliance with permit limits.

Results

Bacteria levels have declined significantly. Most shellfish beds are now open for harvesting in Grays Harbor; harvest will remain prohibited as a routine precaution in areas close to the cities' sewage treatment plants. Of the 93 segments listed as impaired for bacteria by 2004, data indicate that at least 76 segments (covering 128.8 miles) now meet water quality standards. Data collected at a few sites through Ecology's Ambient Monitoring Program showed that two impaired segments met standards in 2004 and 2005, prompting Ecology to remove them from the impaired waters list in 2008.

A watershed-wide sampling study in 2006–2009 showed that FC levels in another 76 segments fell well below the water quality standard of 100 col/100 mL (with an average of 24 samples collected at each of the 94 sampling sites). Further, all sites met the extraordinary FC standard,

which requires a geometric mean of less than 50 col/100 mL (half of the applicable water quality standard) with no more than 10 percent of samples greater than 100 col/100 mL. On the basis of the data, Ecology expects to propose removing the 76 segments from the 2012 impaired waters list for bacteria.

Follow-up monitoring has not been completed for the 15 additional impaired segments. Based on water quality improvements throughout the watershed, Ecology believes those impaired segments likely also meet standards. However, because of a lack of recent data, those 15 segments will remain listed as impaired.

Partners and Funding

Farmers worked with the Thurston, Grays Harbor, Mason and Lewis County conservation districts (CDs) to implement BMPs. Other partners include the Washington State Department of Agriculture; Thurston, Grays Harbor and Lewis County Health Departments; Confederated Tribes of the Chehalis Indian Nation; city of Centralia Port of Centralia; Chehalis Land Trust; Chehalis River Council; Capital Land Trust; Chehalis Basin Partnership; Chehalis Basin Education Consortium; local schools; watershed residents; U.S. Environmental Protection Agency; and Ecology.

Between 1996 and 2008, project partners received almost \$56 million to improve and protect water quality in the Chehalis River Basin. Nonpoint source project funding included \$675,000 in CWA section 319 grants; \$2.2 million in Centennial Clean Water Fund (CCWF) grants to Thurston, Mason and Lewis County CDs; \$500,000 in Local Toxics Control Account grants for stormwater improvements; \$400,000 in Aquatic Lands Enhancement Account grants for habitat improvement and vegetation control; and \$502,000 in special appropriations administered by the state's Shoreland Environmental Assistance Program. Landowners and project sponsors contributed an additional \$1 million toward those projects in cost-share funds. Although the FC pollution was primarily nonpoint source-related, significantly more funding was channeled to point source controls to support the high cost of maintaining and replacing sewage treatment plants. Funding for treatment plants included \$75.5 million in state revolving fund loans and \$18 million in Washington's CCWF grants.




U.S. Environmental Protection Agency
Office of Water
Washington, DC

EPA 841-F-11-00188
June 2011

For additional information contact:

Dave Rountry
Water Quality Program
Washington Department of Ecology,
Southwest Regional Office
360-407-6276 • drou461@ecy.wa.gov

EPA Report

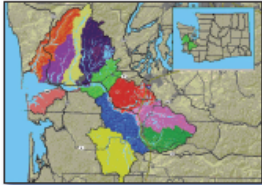
 **Section 319**
NONPOINT SOURCE PROGRAM SUCCESS STORY
Washington
Watershed-wide Implementation of Management Practices Restores River

Waterbody Improved Fecal coliform (FC) bacteria from agricultural runoff and leaking septic systems impaired shellfish harvesting and primary contact recreation uses in the Chehalis River watershed. As a result, the Washington Department of Ecology (Ecology) added 93 segments of the Chehalis River to the state's Clean Water Act (CWA) section 303(d) list of impaired waters between 1996 and 2004. To address the problems, farmers installed numerous agricultural best management practices (BMPs), and local governments increased efforts to identify and upgrade septic systems. FC levels decreased across the watershed. Ecology removed two segments from Washington's impaired waters list in 2008. Data show that another 76 segments are consistently meeting FC water quality standards; Ecology expects to propose removing those segments from the impaired waters list in 2012.

Problem
The Chehalis River drains approximately 2,660 square miles on the coast of Washington and empties into Grays Harbor, an important shellfish area (Figure 1). More than 80 percent of the watershed is forested with another 10 percent dedicated to agriculture. Developed and agricultural areas are concentrated in areas close to waterways.

The applicable water quality standard (primary contact recreation use) requires that FC not exceed a geometric mean of 100 colonies (col) per 100 milliliters (mL), and that no more than 10 percent of all samples be greater than 200 col/100 mL. Water quality monitoring in 1990s indicated that numerous segments in the upper and lower Chehalis River Basin violated water quality standards for FC. As a result, Ecology added a total of 93 segments in the upper and lower Chehalis River to the state's CWA section 303(d) list for bacteria impairment in 1996, 1998 and 2004.

Ecology developed total maximum daily loads (TMDLs) for FC for Grays Harbor/Chehalis River in 2002 and for the upper Chehalis River in 2004. The TMDL assessments found that most of the Chehalis River's FC load originates in the upper watershed and that the FC sources in the upper watershed are nearly all nonpoint in origin. Primary FC sources of concern are animal waste from livestock operations and livestock stream access, agricultural and stormwater runoff and untreated human sewage from failing residential and commercial septic systems. Existing FC permit limits for sewage treatment plant discharges met



Project Highlights
Beginning in 1999, a statewide law required that all dairy farmers develop and implement nutrient management plans. In 2004 partners developed a TMDL implementation plan to help focus BMP implementation efforts. Since then, agricultural landowners have implemented drainage management on more than 100 acres, improved livestock waste storage and transfer systems, planted/fenced 56 miles of shoreline, and installed livestock exclusion/control fencing and alternative water systems (including 2,500 feet of livestock

- **Success Story**
 - Water Bodies Improved
 - 76 Segments Meeting FC WQ Standards (2006-2009)
 - Propose Removing From 2012 Impaired Waters List
- **Projected Success**
 - 15 Possible Sites Removed from TMDL
 - More Data Needed

State Of The River Report

2006-2009

- ✓ WQ Data Analysis
- ✓ Ranking Sample Sites
- ✓ Results Mapped in GIS
- ✓ Results Tables and Charts
- ✓ Chehalis Tribe WQ Data
- ✓ Submit Data to EIM*
- ✓ Old LandSat Land-Use Data

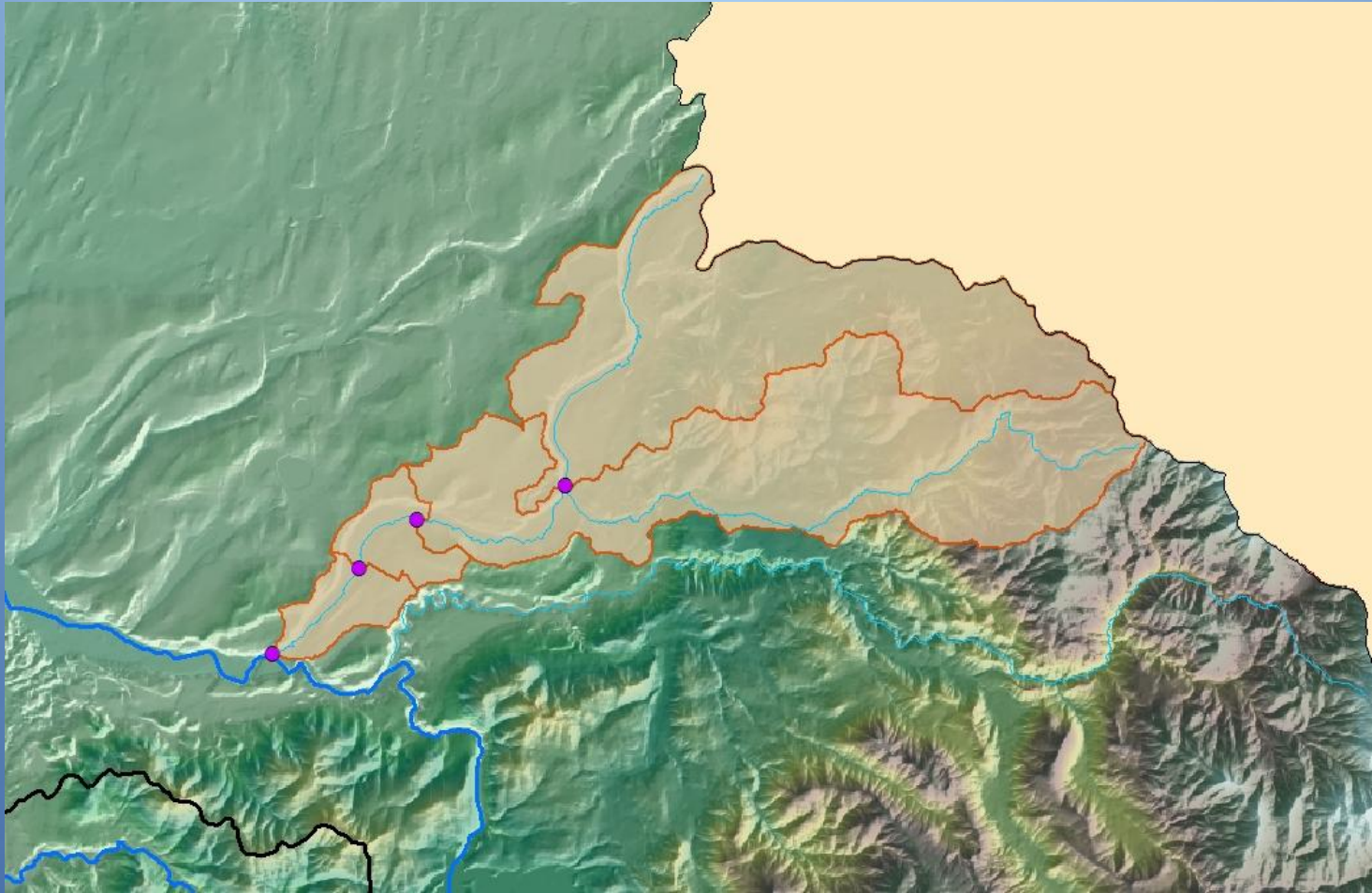
2011 Update

- ✓ WQ Data Analysis
- ✓ Ranking Sample Sites
- ✓ Results Mapped in GIS
- ✓ Results Tables and Charts
- ✓ Chehalis Tribe WQ Data
- ✓ Submit Data to EIM*
- ✓ New Parcel Land-Use Data
- ✓ Permanent Probe Data**
- ✓ Flow Basins
- ✓ Land-Use Calc. and Percent
- ✓ Trendline (2006-2011)

* Environmental Information Management System

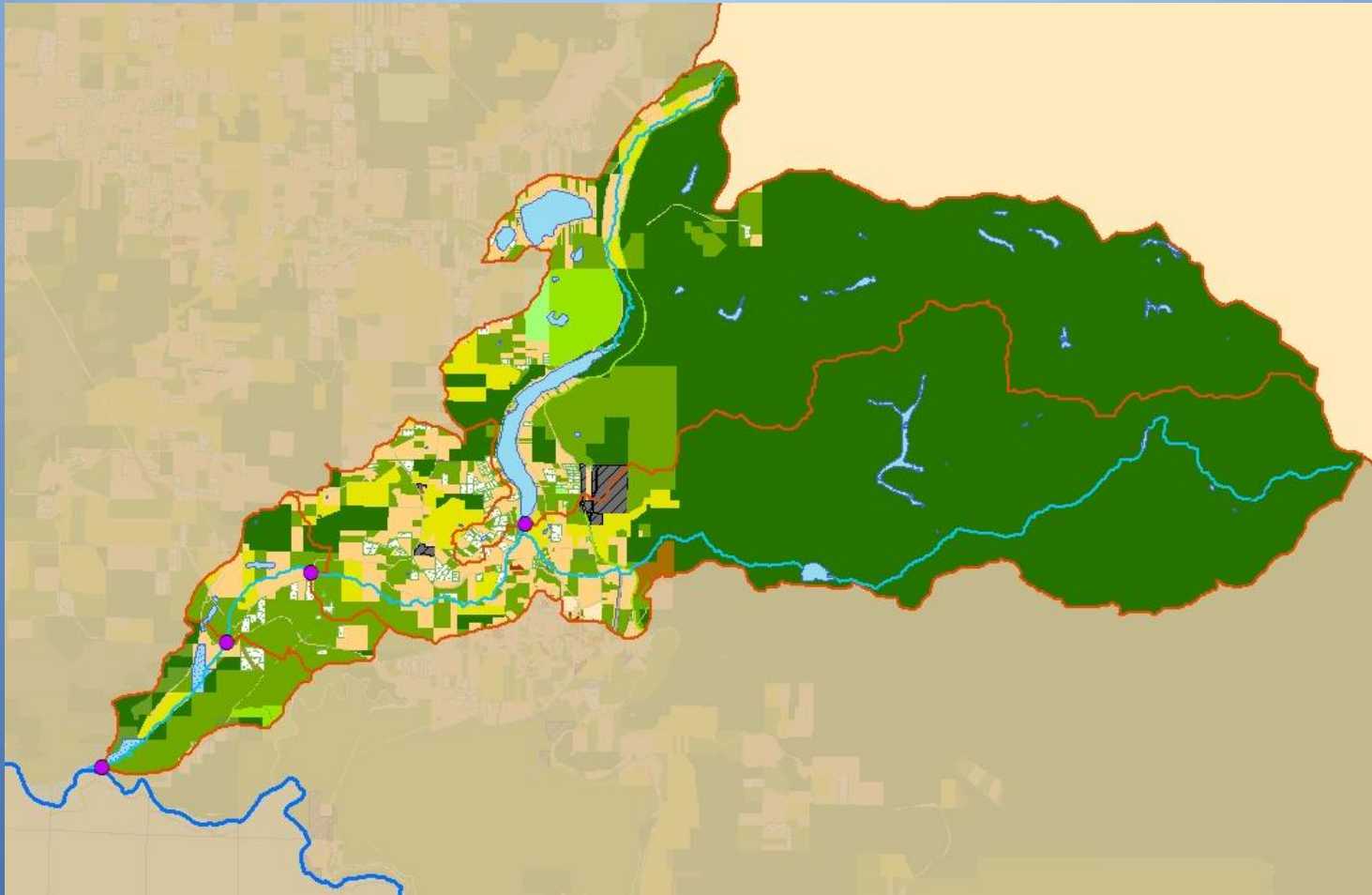
** Subject to Review

Flow Basins



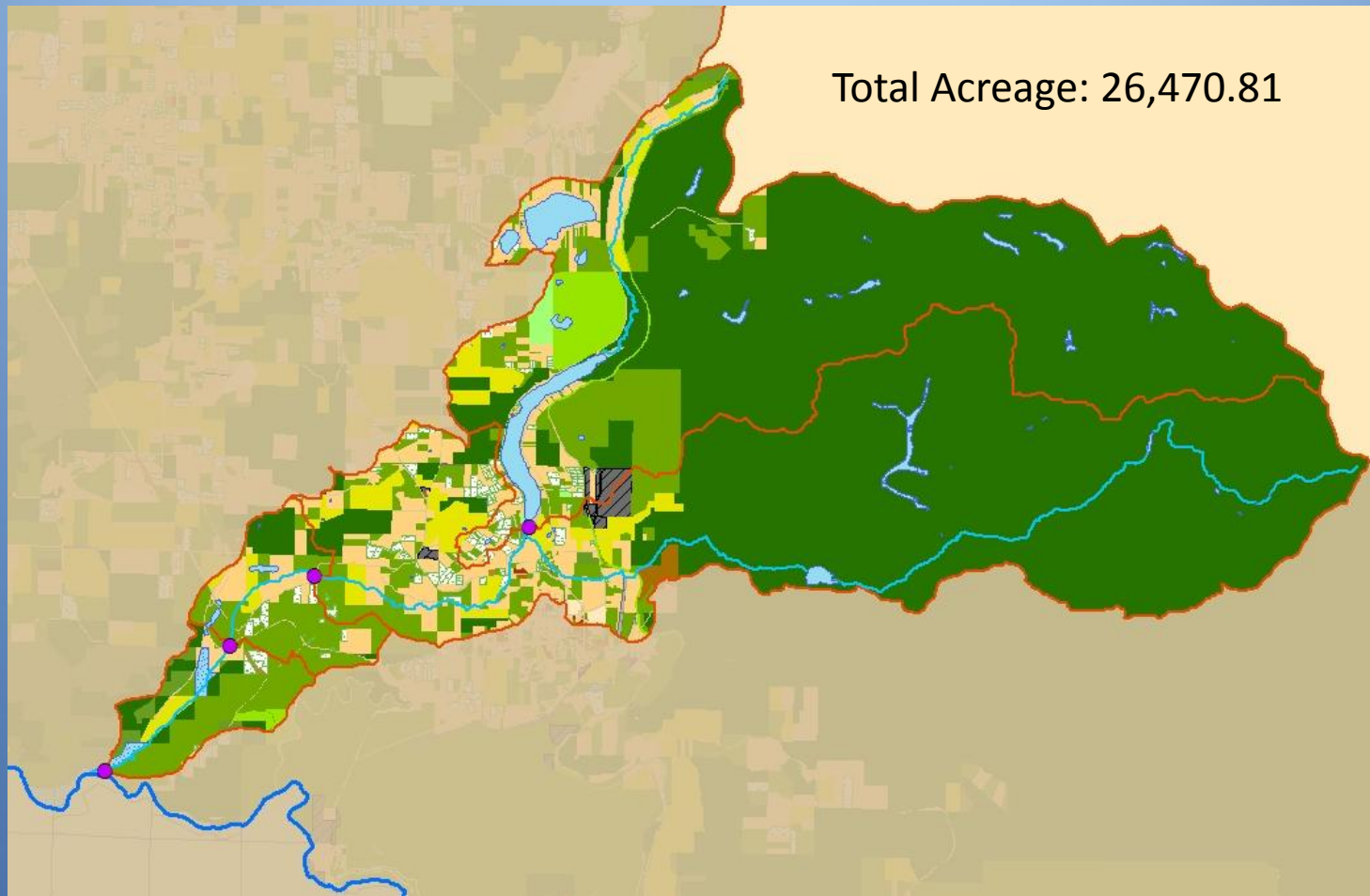
Ohop River Nisqually Basin

Flow Basin & Land-Use



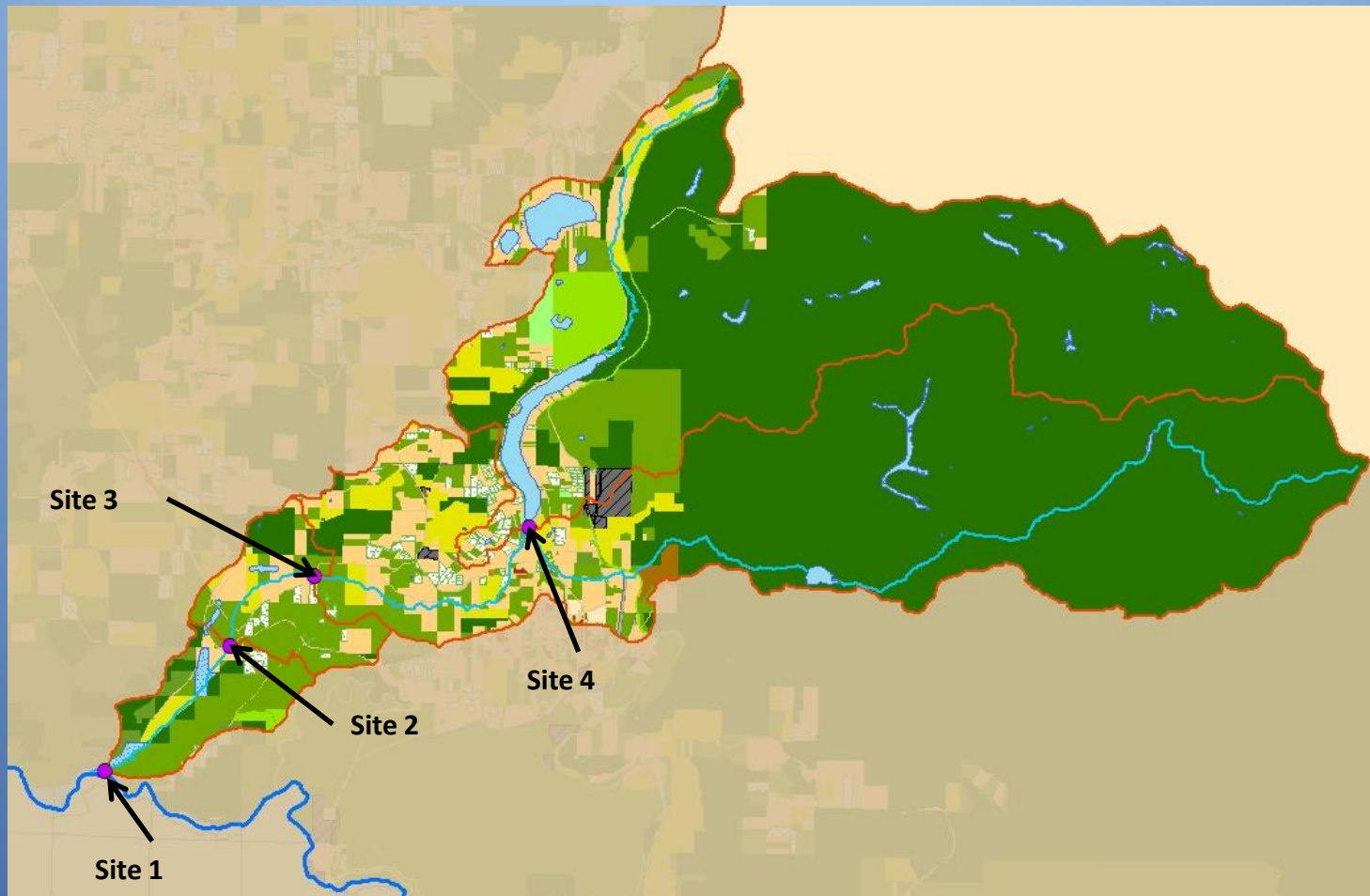
Ohop River Nisqually Basin

Calculate Land Use Area



Ohop River Nisqually Basin

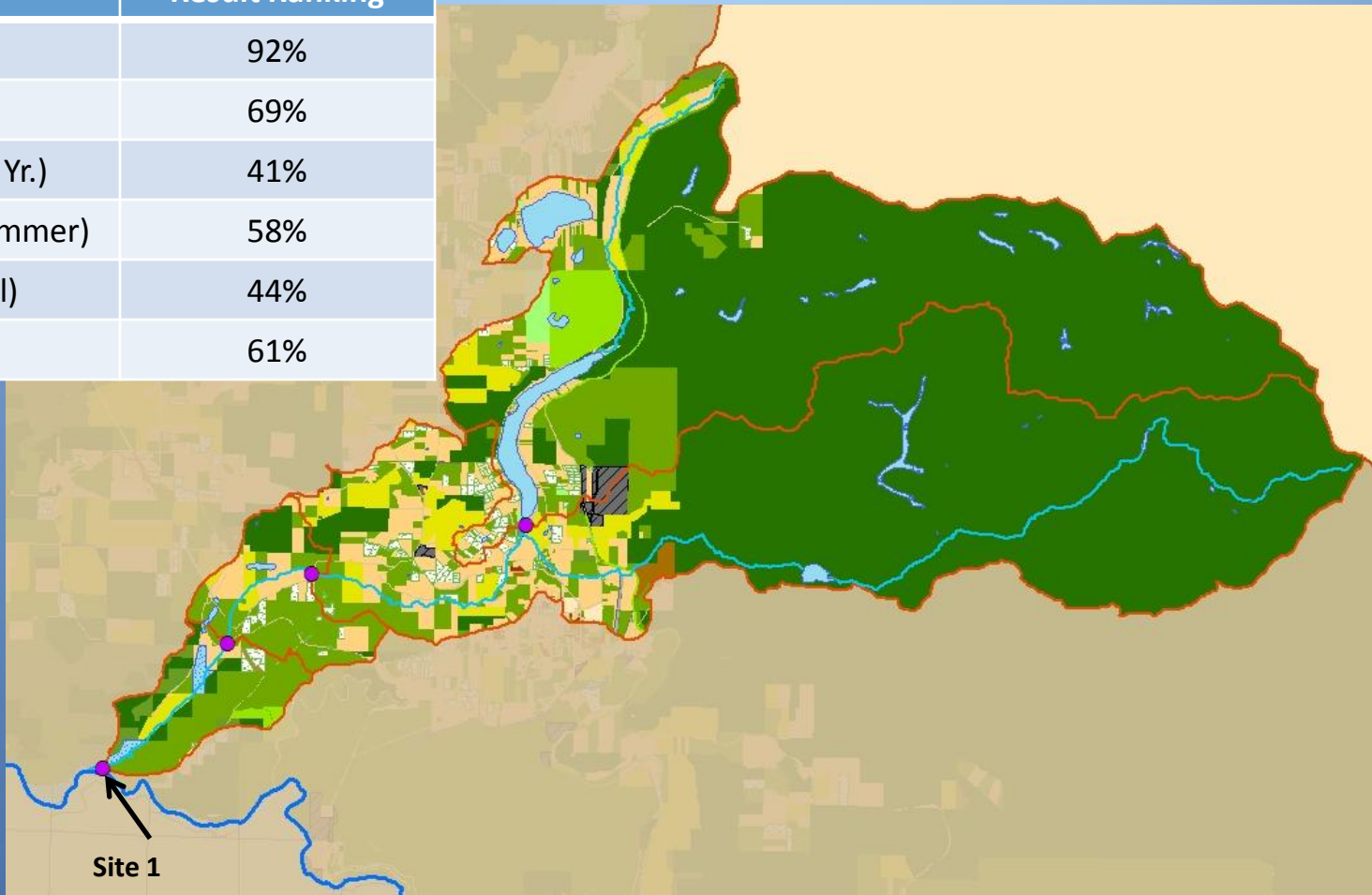
W.Q. Sample Sites



Ohop River Nisqually Basin

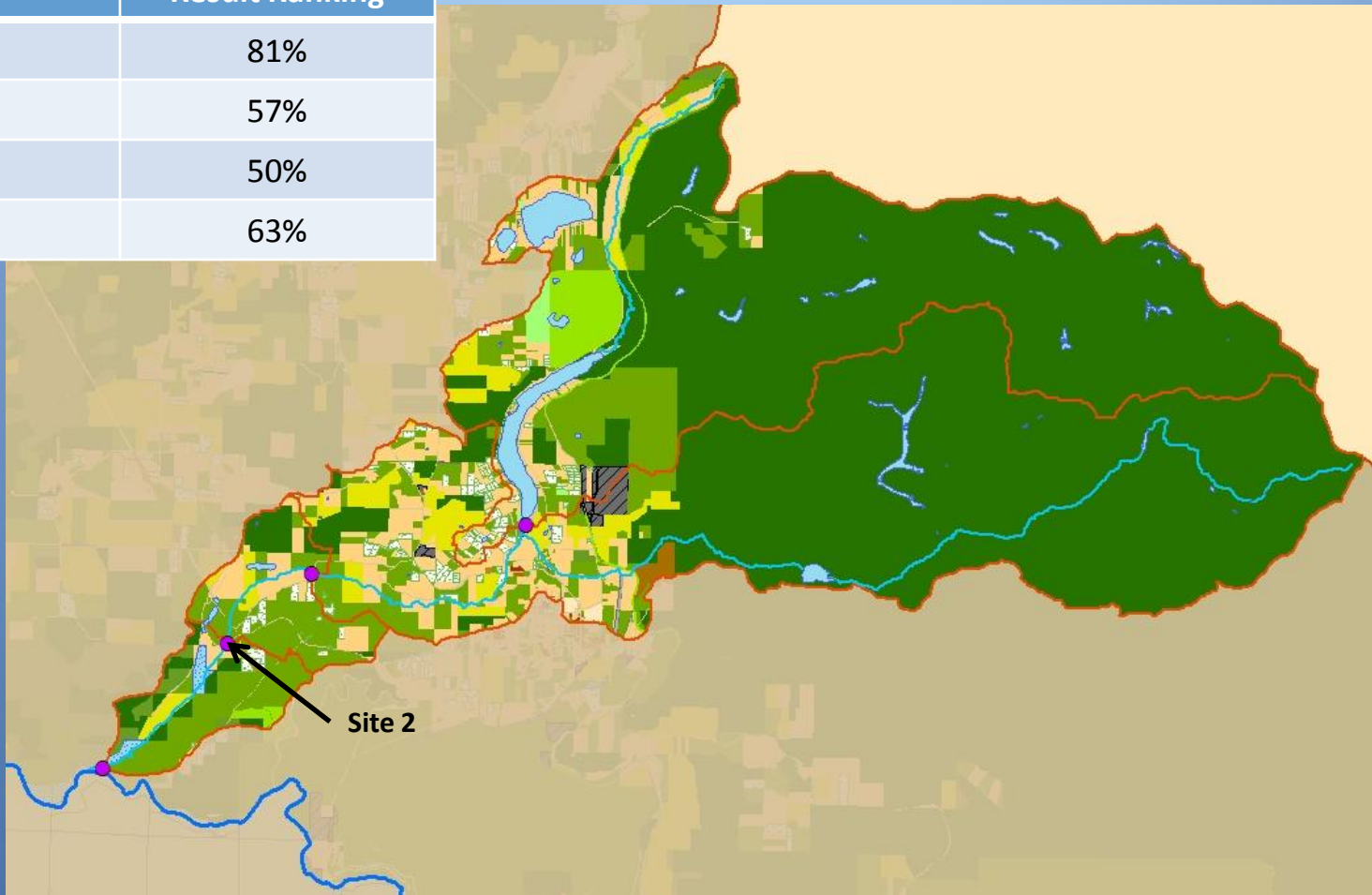
W.Q. Results Site #1

| Parameter | Result Ranking |
|------------------|----------------|
| FC 50 | 92% |
| FC 100 | 69% |
| Temp 1 (All Yr.) | 41% |
| Temp 3 (Summer) | 58% |
| Temp 4 (Fall) | 44% |
| Over All | 61% |



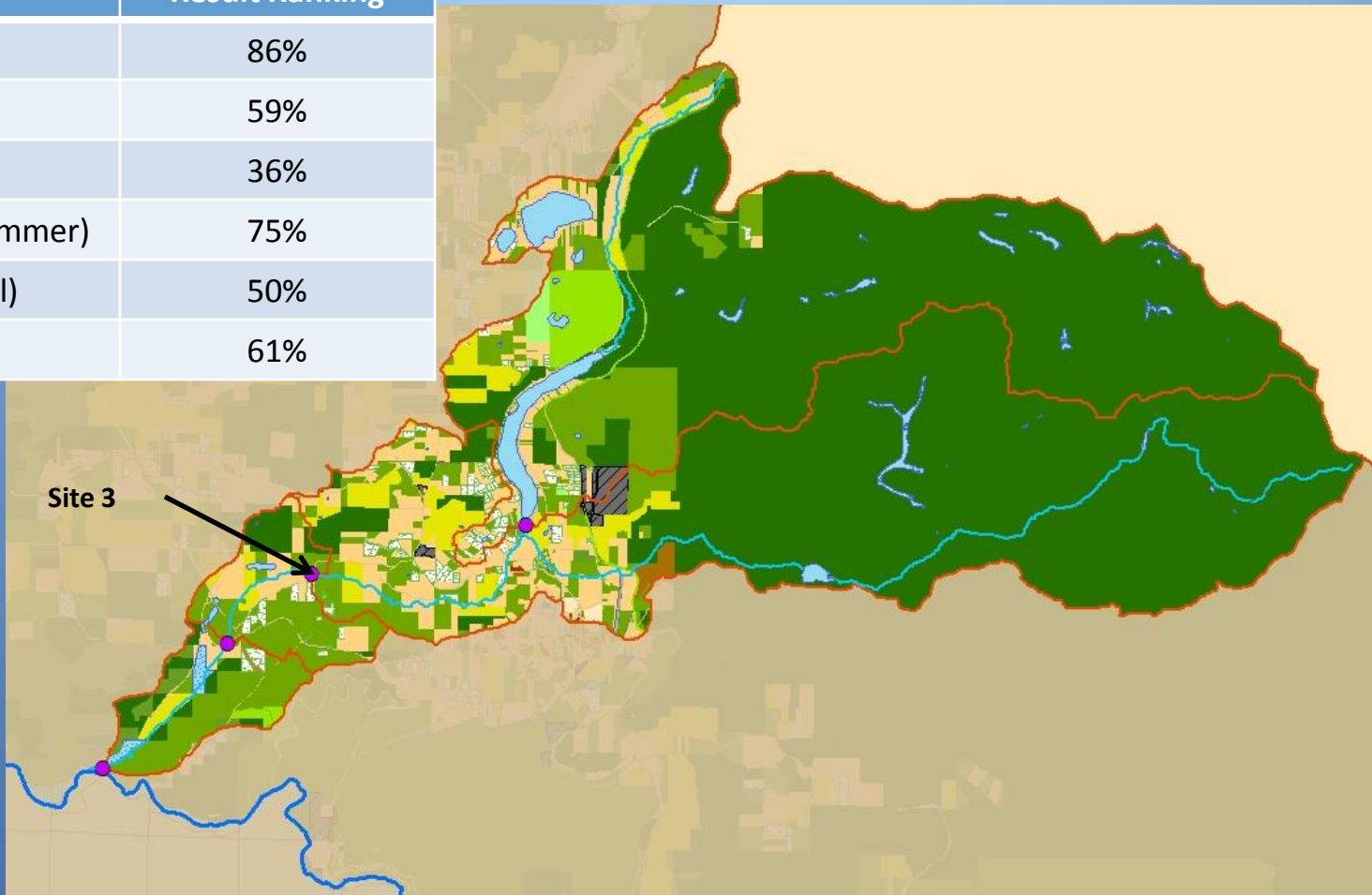
W.Q. Results Site #2

| Parameter | Result Ranking |
|-----------|----------------|
| FC 50 | 81% |
| FC 100 | 57% |
| Turbidity | 50% |
| Over All | 63% |



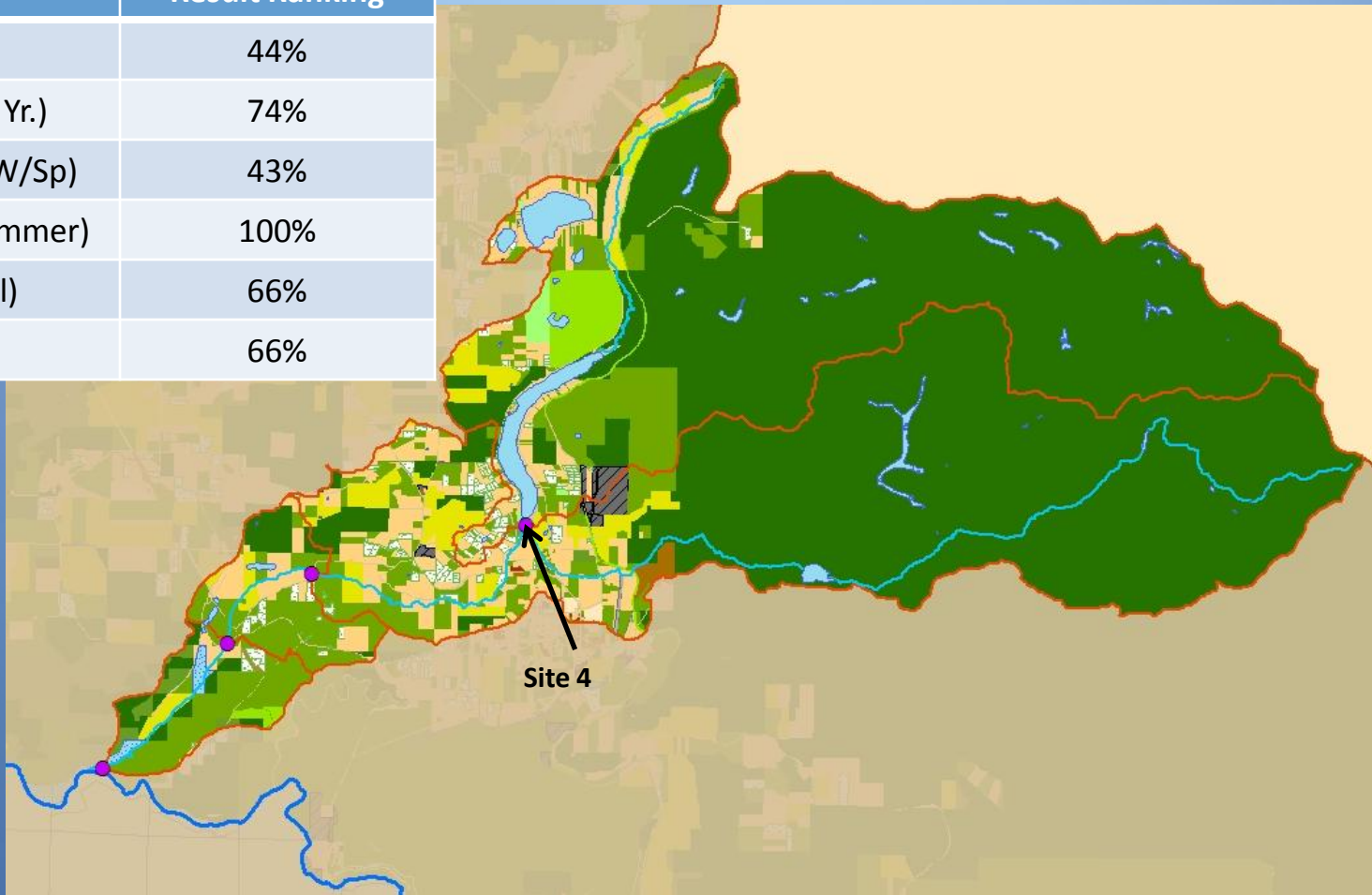
W.Q. Results Site #3

| Parameter | Result Ranking |
|-----------------|----------------|
| FC 50 | 86% |
| FC 100 | 59% |
| Turbidity | 36% |
| Temp 3 (Summer) | 75% |
| Temp 4 (Fall) | 50% |
| Over All | 61% |

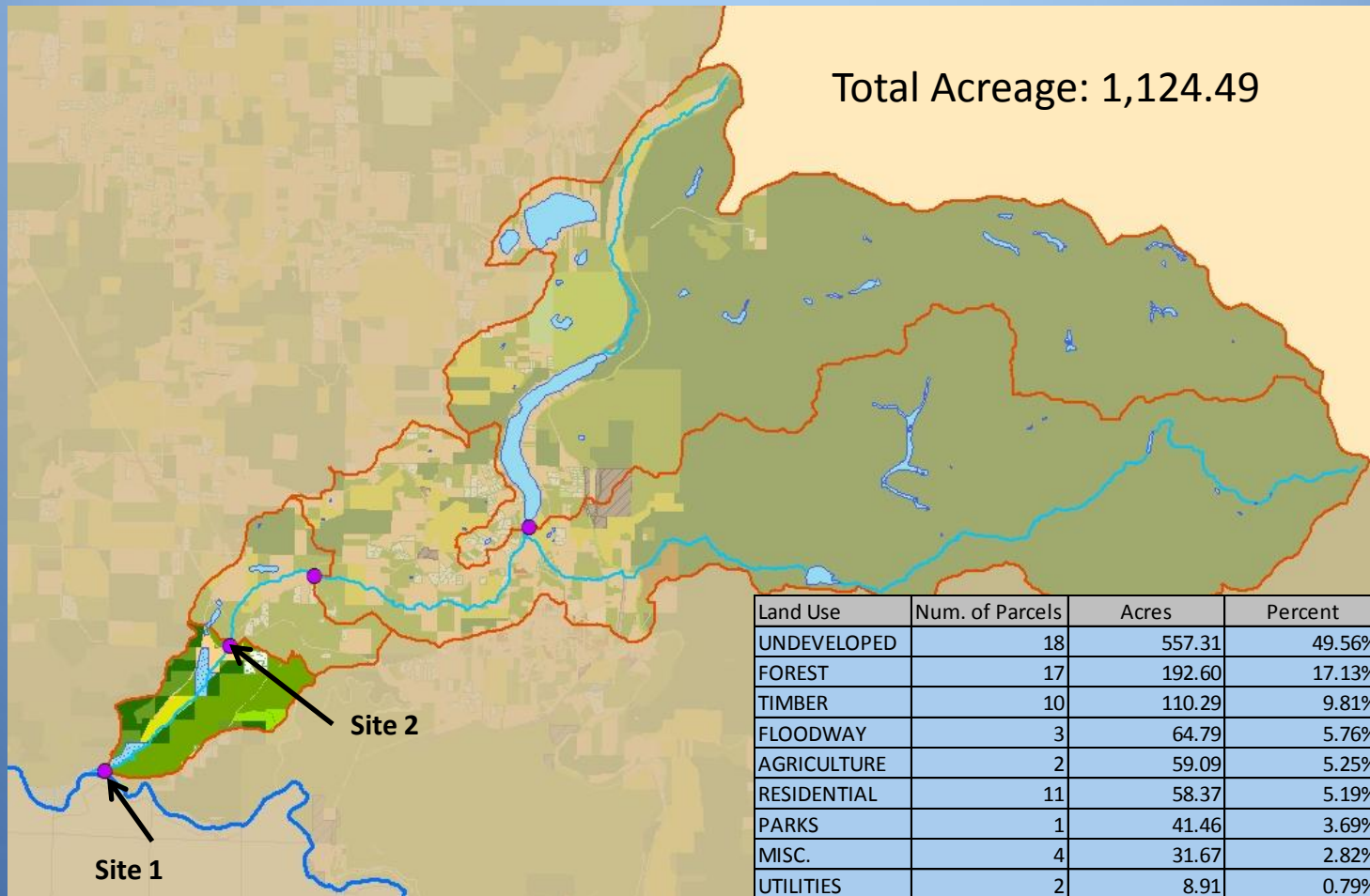


W.Q. Results Site #4

| Parameter | Result Ranking |
|------------------|----------------|
| DO | 44% |
| Temp 1 (All Yr.) | 74% |
| Temp 2 (F/W/Sp) | 43% |
| Temp 3 (Summer) | 100% |
| Temp 4 (Fall) | 66% |
| Over All | 66% |

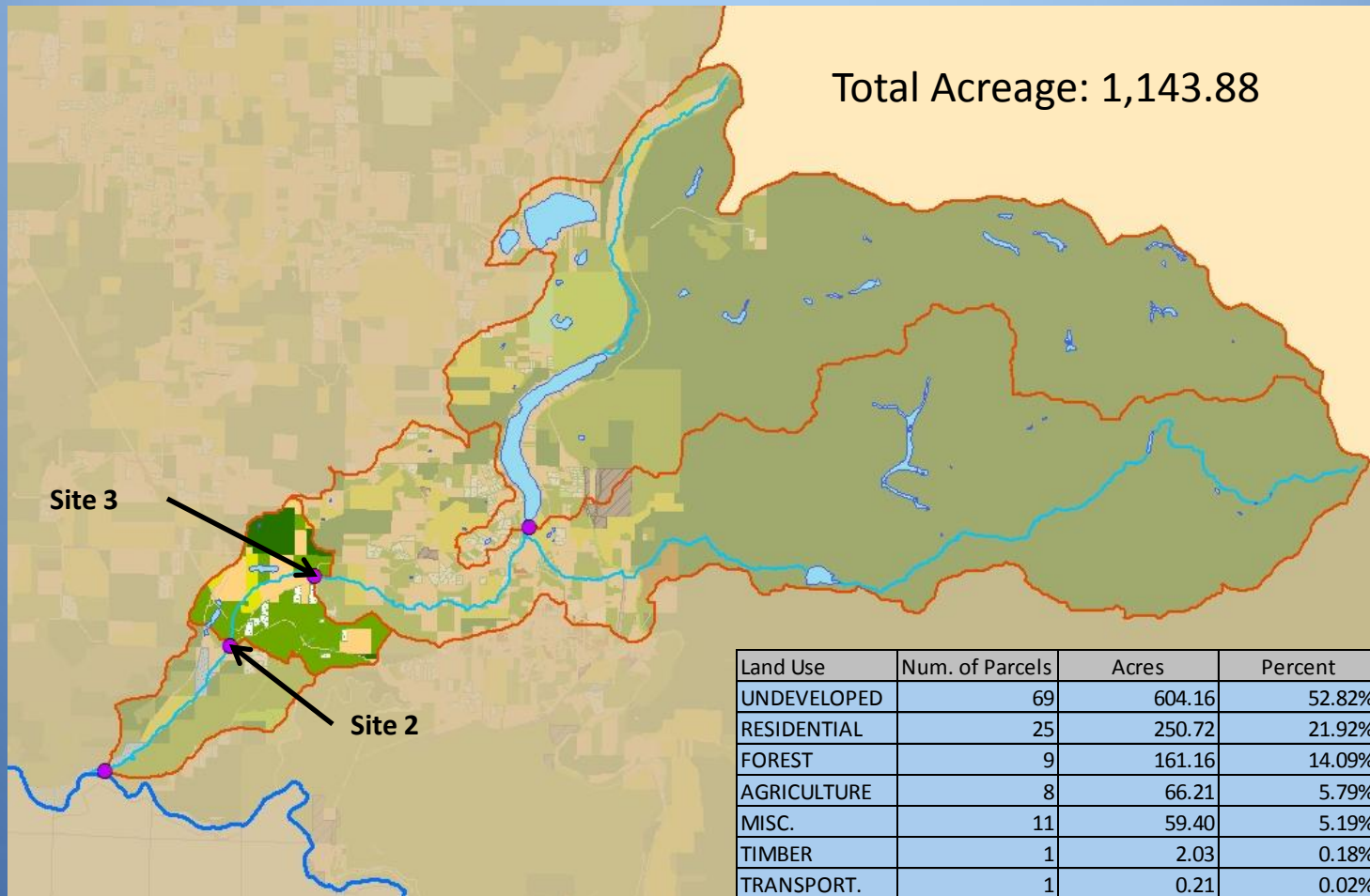


Calculate Land Use Segments



Ohop River Nisqually Basin

Calculate Land Use Segments

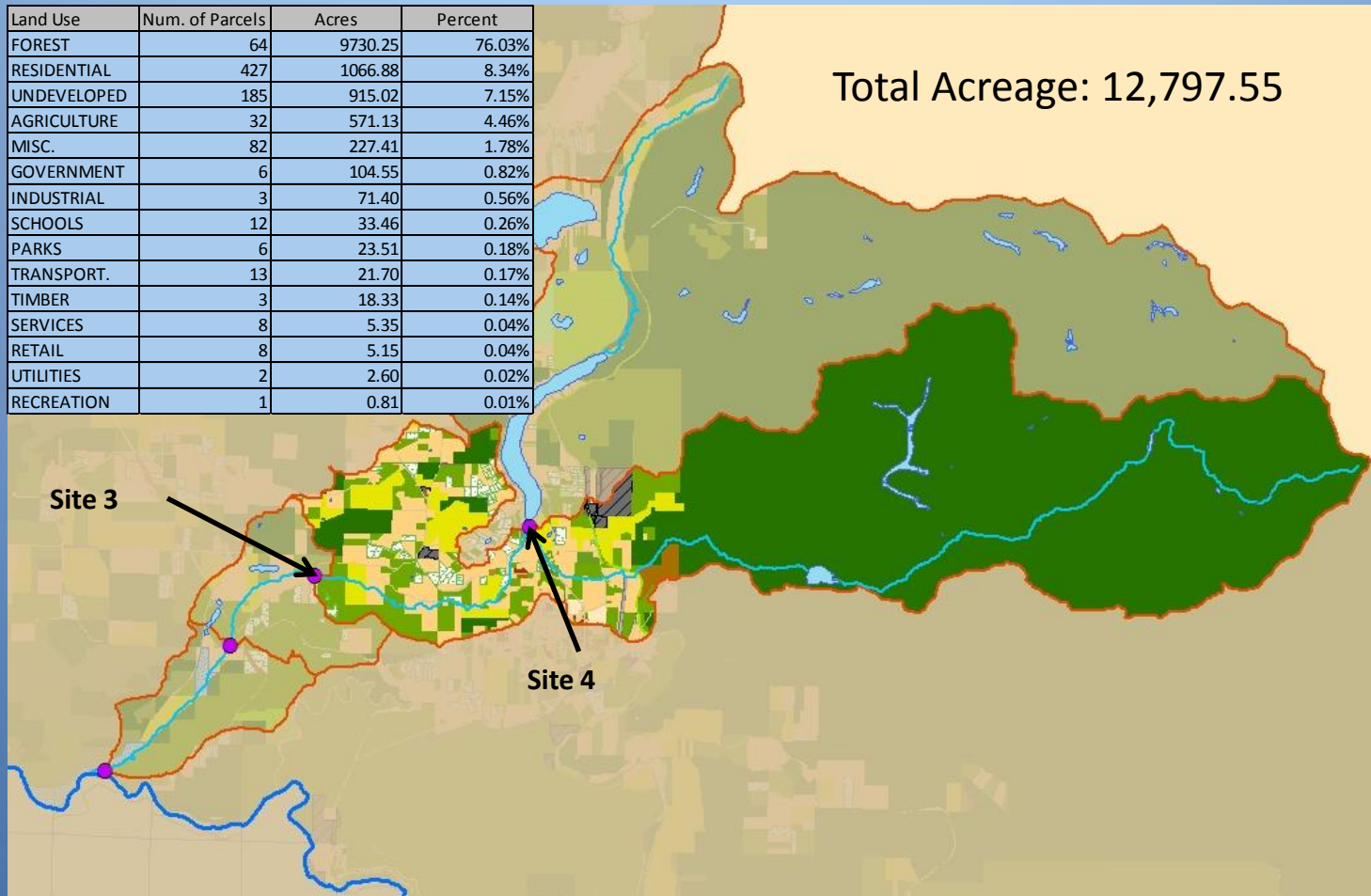


Ohop River Nisqually Basin

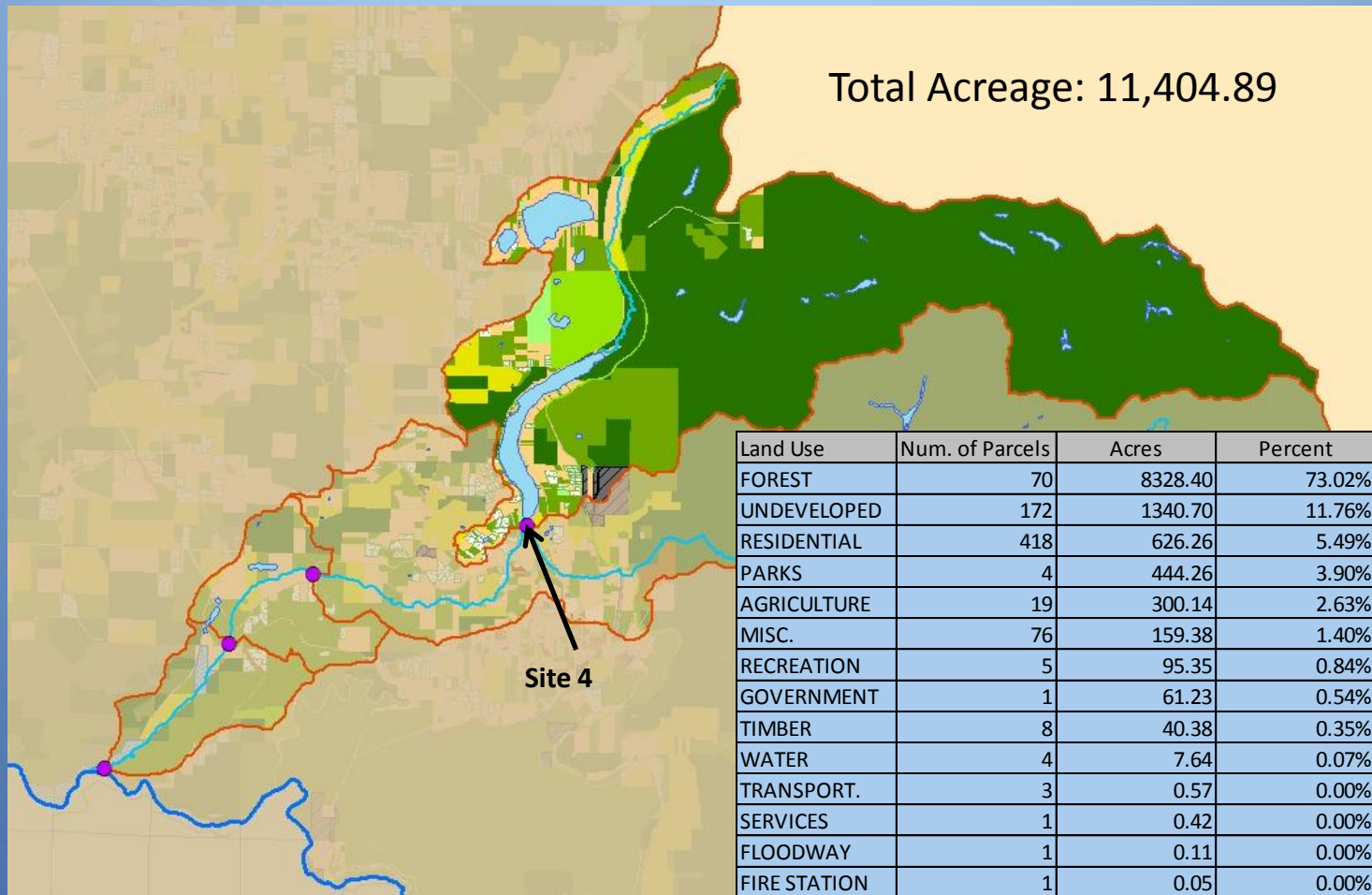
Calculate Land Use Segments

| Land Use | Num. of Parcels | Acres | Percent |
|-------------|-----------------|---------|---------|
| FOREST | 64 | 9730.25 | 76.03% |
| RESIDENTIAL | 427 | 1066.88 | 8.34% |
| UNDEVELOPED | 185 | 915.02 | 7.15% |
| AGRICULTURE | 32 | 571.13 | 4.46% |
| MISC. | 82 | 227.41 | 1.78% |
| GOVERNMENT | 6 | 104.55 | 0.82% |
| INDUSTRIAL | 3 | 71.40 | 0.56% |
| SCHOOLS | 12 | 33.46 | 0.26% |
| PARKS | 6 | 23.51 | 0.18% |
| TRANSPORT. | 13 | 21.70 | 0.17% |
| TIMBER | 3 | 18.33 | 0.14% |
| SERVICES | 8 | 5.35 | 0.04% |
| RETAIL | 8 | 5.15 | 0.04% |
| UTILITIES | 2 | 2.60 | 0.02% |
| RECREATION | 1 | 0.81 | 0.01% |

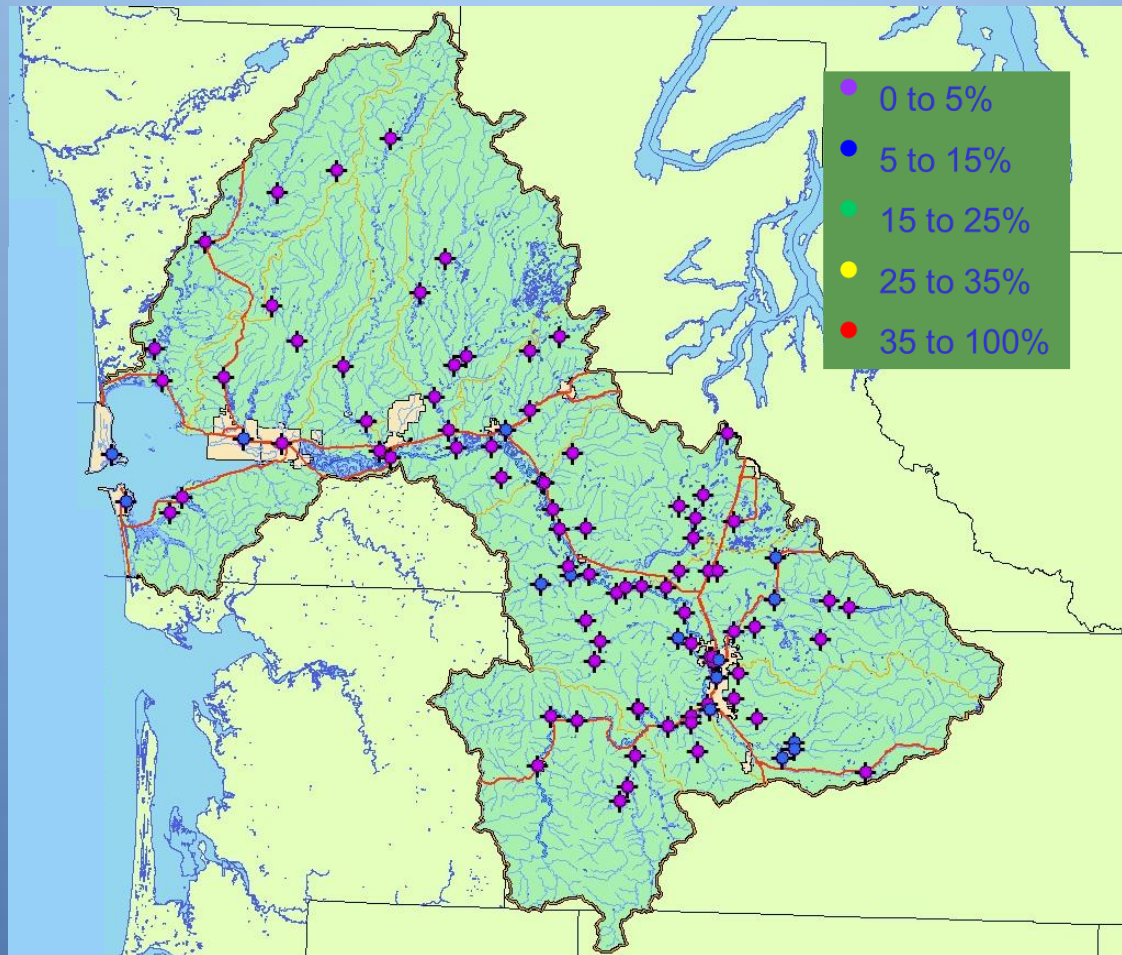
Total Acreage: 12,797.55



Calculate Land Use Segments



Working Together Toward Better Water Quality



The Chehalis Basin Partnership: Making a Difference

State-Of-The-River Report
for
The Chehalis River Basin
2006 – 2011 Update

Questions & Discussion

