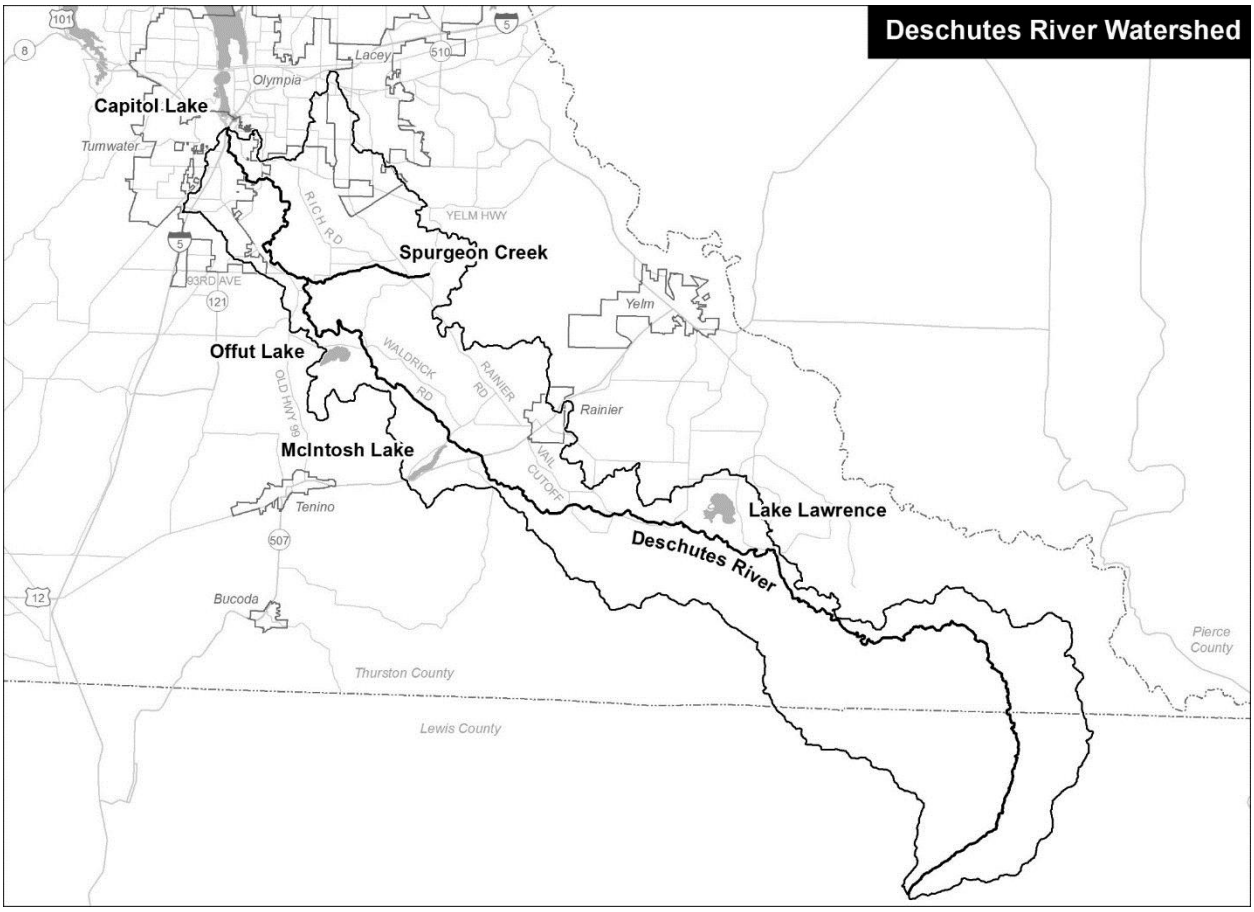
Deschutes River Watershed Survey Analysis

July 2015

Overview: In June 2015, Thurston County and the Thurston Regional Planning Council (TRPC) mailed a survey to 6,916 Deschutes River Watershed residents and property owners who live between the confluence of the Deschutes River and Spurgeon Creek and the border of Thurston and Lewis counties. This area — which includes a mix farms, forests, homes, lakes and small streams — ranks as the most at risk from future development, according to environmental indicators analyzed by the agencies.

TRPC received 663 responses to the print survey and 89 responses to an online version of the survey — for a combined response rate of about 11 percent.

The survey will help Thurston County identify ways to manage growth amid the study area (see map) while protecting clean water, wildlife habitat, and other important ecological functions. Below is a summary of responses to the survey.



Question 1 asked respondents what type of land they own and/or live on, as well as how they use it.

- 33 percent of the respondents — the largest share — marked that they live or own property next to a stream, lake or river;
- 19 percent own farm land;
- 11 percent own forest land;
- 6 percent work in the watershed;
- 6 percent don't live, work or own property in the watershed but consider it important.

Question 2 asked respondents to mark, on a scale of one to five, how concerned they are about clean water in the watershed (*1 = not at all concerned; 5 = very concerned*).

Forty-one people did not answer to the question. Of the 711 who answered the question, the average score was 4.15 — indicating a high level of concern for water quality. This isn't surprising, as those concerned about water quality are more apt to fill out a survey about the issue. The following is a breakdown of all responses:

- 49 respondents (7 percent) marked 1;
- 30 respondents (4 percent) marked 2;
- 82 respondents (12 percent) marked 3;
- 151 respondents (21 percent) marked 4;
- 399 respondents (56 percent) marked 5.

Question 3 asked respondents who indicated concern for water quality to mark what they regard as the top three risks to clean water in the watershed. Respondents were presented a list of 11 options:

- Farming practices
- Disposal of hazardous waste
- Loss of trees along streams/erosion
- Land clearing/filling
- Landslides
- Pollution from septic systems
- Climate change
- New development
- Pet waste
- Pollution from stormwater runoff
- Other

- New development ranked highest, with 318 responses.
- Four other categories showed comparable levels of high concern, however: disposal of hazardous waste (310); loss of trees along streams/erosion (254); pollution from septic systems (234); and, land clearing/grading (229). Together, these responses suggest that survey respondents are concerned about the combined effect of development, pollution and land degradation on water quality.
- Responses to the remaining categories were: pollution from stormwater runoff (190); farming practices (169); climate change (78); pet waste (40); and, landslides (26).
- 69 respondents did not answer the question.

- Another 92 respondents marked “other” and wrote in comments, which ranged widely. Recurring themes included concern about too much government regulation, point source pollution (industrial, agricultural, residential), and rural population growth.

Question 4 asked respondents whether there are specific places in the watershed they think are important to preserve.

- Written answers to this question ranged from all, to some, to none.
- Many respondents noted that preservation of the watershed — specifically, wetlands, streams and lakes — is important for salmon and other fish and wildlife.
- Several others noted that protection of all farmlands should be a priority.
- Specific areas respondents singled out for preservation included: Spurgeon Creek; Upper Deschutes farming areas; Offutt Lake; Between Old Hwy. 99 and McIntosh Lake; Deschutes Falls; Lake Lawrence; Wolf Haven; and, the Vail Road area.

Question 5 asked respondents whether they have had any water quantity or quality issues with their well and to explain.

- 421 respondents answered the question and 331 skipped it in the print and online survey.
- Of those who answered the question, 287 (68 percent) wrote that they have no water quality or quantity problems with their well. A handful of people who answered the question noted that their property receives water from a municipality.
- 74 of those who answered the question (18 percent) cited water quality and/or quantity problems with their water:
    - The most common water quality problems cited were water discoloration and/or odor. In small numbers, respondents also contend they have had problems such as low water pressure, soft or hard water, or E. coli growth in wells.
    - Fourteen respondents cited specific water quantity problems, such as wells going dry during summer months and other periods of low rain.

Question 6 asked respondents to rate on a five-point scale (*1 = not important; 3 = somewhat important; 5 = very important*) the importance of 10 actions in the watershed.

- In summary, respondents ranked all categories high, with each category having an average score of more than 4. That said, a more nuanced evaluation shows that respondents want a balance between ensuring clean water and protecting property rights.
- “Protecting Clean Drinking Water” ranked first — by a wide margin — with an average score of 4.61. Ranking second and third, respectively, were “Protecting Private Property Rights” (4.31) and “Protecting Puget Sound Water Quality” (4.30).
- The following is a table with all categories and their average score:

Category	Average Score	Rank
Protecting Clean Drinking Water	4.61	1
Protecting Private Property Rights	4.31	2
Protecting Puget Sound Water Quality	4.30	3
Preserving Wildlife Habitat	4.26	4
Maintaining Rural Character	4.12	5
Preserving Local Farms	4.10	6
Maintaining Healthy Salmon Runs	4.06	7
Preserving Working Forests	4.03	8
Maintaining Healthy Fishing Stock	4.03	9
Swimmable Lakes and Streams	4.02	10

Question 7 asked respondents what they value currently about the Deschutes River Watershed. They were presented with a list of 10 options and asked to mark their top three.

- 21 returned surveys listed no response.
- Consistent with general themes elsewhere in the survey, respondents showed strong affinity for the area's rural lifestyle, privacy and proximity to water, wildlife and open spaces. Below is a list of the 10 options in order of respondents' average ranking.

Category	Percentage	Rank
Rural Lifestyle	19.9	1
Natural Environment/Scenery	18.5	2
Wildlife	13.5	3
Privacy	10.9	4
Living On Or Near Waterfront	7.8	5
Parks, Trails, Or Other Recreation Opportunities	7.7	6
Timberlands	5.7	7
Fishing Opportunities	5.5	8
Farming	3.9	9
Affordable Housing	2.6	10
Sense Of Community	2.4	11
Other	1.2	12
Job Opportunities	0.5	13

Question 8 asked respondents: If you could write the future, what would this area look like in 25 years?

- Written responses ranged widely, but growth and environmental protection were a common threads once more.
- Of the 480 people who answered this question, about 47 percent wrote that they wanted very little or no change in the area. There were clear disagreements about whether more or fewer land-use regulations are needed to achieve this, however.
- Some respondents expressed wariness about existing or potential government regulations that restrict how private landowners may use their land (e.g., subdividing lots, harvesting timber).
- Other respondents called for no new rural development — particularly along rivers and streams — which would likely require changes to existing regulations.
- Conversely, about 7 percent of respondents wrote that they would like to see additional rural housing (e.g., single-family homes on five-acre lots or amid cluster developments), small-scale commercial development and bigger roads.
- Though the survey question showed clear differences of opinion about growth and government regulations, many of its respondents shared a desire to protect the natural environment (water, wildlife, fish) and the benefits it affords. To achieve this, respondents called for a variety of measures, including: preserving zoning that allows farming; prohibiting clear-cutting of forests; and, converting septic systems to sewer.
- Capitol Lake, while not in the study area, was a popular topic of concern.

Question 9 asked respondents whether they had any additional comments or concerns.

As with Question 8, the written responses varied widely. Common themes were:

- Halt the spread of invasive species in aquatic and upland areas;
- Limit or halt growth/sprawl in the rural areas;
- Clean up/crack down on unsightly rural areas (e.g., junk cars, trash);
- Stop dumping pollutants into waterways;
- Don't increase taxes and government intervention;
- Prevent clear-cutting of vegetation;
- Ensure that homeowners may continue to draw clean water from private wells;
- Don't allow new buildings near streams;
- Listen to the residents/property owners.

Several respondents expressed unease about climate change's potential impacts — notably, that a warming world could reduce future water availability and spur population migration to the region from less-temperate areas.

Conclusions: Residents and property owners in the middle and upper reaches of the Deschutes River Watershed are clearly concerned about water quality and development impacts — be they more pollution, more density, or a changing sense of place. There are clear differences of opinion about familiar and factious issues, however: One person wants a new cell tower, while another doesn't. One

wants the right to subdivide his nest-egg parcel into a new residential lots, while another wants no new development. One wants stronger environmental regulations, while another wants no government interference.

Some of these issues are tied closer to water quality and quantity than others. But, in its entirety, the survey makes clear that the vast majority of respondents like where they live today and desire a future with clean and plentiful water for drinking and supporting fish and wildlife. The question and fundamental challenge of this project is how to ensure this.

Local government planners should use this survey and other analysis (e.g., the current conditions report and development scenarios) to evaluate policy changes, communicate clearly, elicit additional input, and make informed recommendations. This will help residents and property owners understand the diversity of opinions, tradeoffs, and roles for both the public- and private-sectors. Ideally, good analysis and an informed citizenry will help public policymakers strike an equitable and effective regulatory balance in the watershed.