San Juan County Parks, Trails, and Natural Areas Plan

ESRI International User Conference 2011

A special thanks to the Burning Foundation for helping to make this project possible
Presentation Overview

- Introduction to TPL
- Overview of San Juan County
- The need for an updated Parks, Trails, and Natural Areas Plan
- The GIS component of the plan:
  - Gathering data, repairing data, capturing local knowledge
  - Mapping existing recreational resources
  - Classifying recreational resources
  - Identifying opportunities for increasing access to water,
- Six-year Action Plan
Conserving Land for People

The Trust for Public Land conserves land for people to enjoy as parks, gardens, and other natural places, ensuring livable communities for generations to come.

TPL Mission Statement
TPL’s Conservation Services

- **Conservation Vision**: Helping communities develop a vision and road map to conserve lands they value.

- **Conservation Funding**: Helping communities create funding for parks and land conservation.

- **Conservation Transactions**: Helping communities and agency partners evaluate and purchase priority lands.
Conservation Vision

Setting Priorities, Creating a Road Map

TPL helps agencies and communities build conservation plans from the ground up. We work with key stakeholders to define conservation priorities, identify lands to be protected, and develop strategies to be successful.
San Juan County--Geography

- 743 islands
- 20 islands with year-round residents
- 180 square miles
- 375 miles shoreline
- 600 square miles of inland sea
- Friday Harbor on San Juan Island is the only incorporated town
San Juan County--Demography

• Older, retiring population
  – Fastest growing age group is 50+

• Part-time population
  – 43.2% are part-time residents

• Seasonal influx of tourists
  – Tourism drives the local economy

• High cost of living and housing affordability
  – Influx of wealthy retirees and second-home owners has driven up home prices
San Juan County—Access Only by Ferry or Plane
San Juan County—Need for an Updated Plan

• This Plan substantially updates the 2005-2010 Plan for Parks, Recreation, and Preserved Lands for San Juan County
• Maintains County’s eligibility for state-based park and recreation grant funding.
• Significant updates and enhancements include:
  – Park, Trail, and Natural Area Inventory and Classification System
  – Comprehensive Assessment of Community Needs
  – Collaborative Mission and Long-term Community Vision
  – Detailed Six-year Action Plan
Community Needs & Priorities

**Trails**
Over 90% of residents ranked trails as a key priority

**Land Protection**
88% of residents support further land protection

**Water Access**
Fewer than 25% of residents feel there is enough access

**Stewardship & Maintenance**
More community engagement in caring for parks, trails, and land
2030 Vision for Parks, Trails, and Natural Areas

We envision an interconnected integrated system of parks, trails, and natural areas that provides easy access to the water and natural areas; facilitates safe, non-motorized travel throughout the community; celebrates island culture, character, and a healthy environment; and is delivered through well-funded, efficient County programs and innovative partnerships.
Mapping the Community’s Recreation Resources

- **Public Land Ownership**
  - What does the County own? What do other public agencies own? Where are the road ends?

- **Trails**

- **Marine Access Sites**

- **Park Classification**
  - Regional --Natural Areas
  - Local --Conservation Easements
  - Pocket
  - Special Facilities
Mapping the Community’s Recreation Resources

- **Challenges:**
  - Three different, mutually exclusive land ownership datasets
  - Very little existing trails data
  - Poor spatial accuracy of existing data for Marine Access Sites

- **Solutions:**
  - We worked closely with County and TPL staff to clarify questionable ownership data, fix and augment Marine Access Sites, and create trails data from scratch with community input
Land Ownership—Capturing Local Knowledge
Land Ownership—San Juan County, Island
Land Ownership—Orcas Island
Land Ownership—Shaw Island
Lopez Land Ownership
Marine Access

Map 13: West Sound Public Dock
Map 27: Hawkins Road End
Park and Trail Classification
## Quantifying Community Recreation Resources

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Quantity</th>
<th>Total Acreage (%)</th>
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</thead>
<tbody>
<tr>
<td>Park</td>
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<tr>
<td>Regional Park</td>
<td>181.3</td>
<td>3.1%</td>
</tr>
<tr>
<td>Local Park</td>
<td>11.8</td>
<td>0.2%</td>
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<tr>
<td>Pocket Park</td>
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<td>0.1%</td>
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<tr>
<td>Special Facility</td>
<td>1.5</td>
<td>0.0%</td>
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<tr>
<td><strong>Subtotal (acres)</strong></td>
<td><strong>198.7</strong></td>
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<tr>
<td>Natural Areas</td>
<td></td>
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<tr>
<td>Natural Area Preserve</td>
<td>3,444.3</td>
<td>59.6%</td>
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<tr>
<td>Conservation Easement</td>
<td>2,135.2</td>
<td>37.0%</td>
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<tr>
<td><strong>Subtotal (acres)</strong></td>
<td><strong>5,579.6</strong></td>
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<tr>
<td>Trails</td>
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<tr>
<td>Right-of-Way Trail</td>
<td>6.4</td>
<td></td>
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<tr>
<td>Rustic Trail</td>
<td>1.7</td>
<td></td>
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<tr>
<td><strong>Subtotal (miles)</strong></td>
<td><strong>8.1</strong></td>
<td></td>
</tr>
<tr>
<td>Marine Access</td>
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<td></td>
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<tr>
<td>Docks</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Shoreline Access Road Ends</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Boat Launch/Ramps</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal (sites)</strong></td>
<td><strong>51</strong></td>
<td></td>
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</table>
Identifying Opportunities

• What the community wants:
  – An interconnected system of trails and open space for all users
  – Natural, unspoiled, wild, healthy outdoor spaces
  – More open spaces, trails, and access to water
  – Productive agricultural lands
  – Diverse recreational opportunities
Potential Trail Corridors—Lopez & San Juan
Measuring Access to Water

- **Used Network Analyst to measure access to Road Ends, Public Shoreline, Docks, and Boat Ramps:**
  - Access to Road Ends, Docks, and Boat Ramps. Created 1, 2, and 3 mile distance polygons from each road end. Used ‘service areas’ to sum residential structures within each distance band.
  - Access to Public Shoreline. Created points at 500’ intervals on boundaries of each public shoreline parcel, created 1, 2, and 3 mile distance polygons from these.
Access to Water—5 steps

1. Identify islands for analysis
2. Prepare road network
3. Prepare target data
4. Generate service areas
5. Sum residential structures
Water Access--Orcas
Water Access--Lopez
## Quantification of Water Access by Island

### Access to Road Ends

<table>
<thead>
<tr>
<th>Distance</th>
<th>All Islands</th>
<th>Lopez</th>
<th>Orcas</th>
<th>San Juan</th>
<th>Shaw</th>
<th>PERCENT</th>
<th>Lopez</th>
<th>Orcas</th>
<th>San Juan</th>
<th>Shaw</th>
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<td>0 - 1</td>
<td>3,109</td>
<td>621</td>
<td>1,161</td>
<td>1,467</td>
<td>68</td>
<td>30%</td>
<td>26%</td>
<td>34%</td>
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<td>35%</td>
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<td>1-2</td>
<td>4,087</td>
<td>772</td>
<td>905</td>
<td>1,072</td>
<td>71</td>
<td>24%</td>
<td>19%</td>
<td>48%</td>
<td>66%</td>
<td>49%</td>
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<tr>
<td>2 - 3</td>
<td>1,631</td>
<td>517</td>
<td>455</td>
<td>577</td>
<td>82</td>
<td>15%</td>
<td>20%</td>
<td>15%</td>
<td>12%</td>
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<td>3+</td>
<td>3,191</td>
<td>280</td>
<td>1,140</td>
<td>1,742</td>
<td>25</td>
<td>30%</td>
<td>19%</td>
<td>34%</td>
<td>36%</td>
<td>10%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>10,539</strong></td>
<td><strong>2,026</strong></td>
<td><strong>3,420</strong></td>
<td><strong>4,858</strong></td>
<td><strong>235</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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### Access to Public/Protected Lands on the Shore

<table>
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<th>Orcas</th>
<th>San Juan</th>
<th>Shaw</th>
<th>PERCENT</th>
<th>Lopez</th>
<th>Orcas</th>
<th>San Juan</th>
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<td>2,491</td>
<td>825</td>
<td>598</td>
<td>1,031</td>
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<td>41%</td>
<td>17%</td>
<td>21%</td>
<td>16%</td>
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<tr>
<td>1-2</td>
<td>3,285</td>
<td>650</td>
<td>678</td>
<td>1,604</td>
<td>64</td>
<td>32%</td>
<td>33%</td>
<td>28%</td>
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<tr>
<td>2 - 3</td>
<td>2,448</td>
<td>370</td>
<td>660</td>
<td>1,256</td>
<td>81</td>
<td>23%</td>
<td>18%</td>
<td>26%</td>
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<td>3+</td>
<td>2,304</td>
<td>603</td>
<td>1,251</td>
<td>877</td>
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<td>22%</td>
<td>6%</td>
<td>37%</td>
<td>16%</td>
<td>6%</td>
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<tr>
<td><strong>Total</strong></td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
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### Access to Docks

<table>
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<th>San Juan</th>
<th>Shaw</th>
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<th>Lopez</th>
<th>Orcas</th>
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<td>15%</td>
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<tr>
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<td>18%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2 - 3</td>
<td>1,303</td>
<td>418</td>
<td>901</td>
<td>-</td>
<td>-</td>
<td>13%</td>
<td>21%</td>
<td>26%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>3+</td>
<td>7,473</td>
<td>1,043</td>
<td>1,337</td>
<td>1,458</td>
<td>235</td>
<td>71%</td>
<td>51%</td>
<td>39%</td>
<td>100%</td>
<td>100%</td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
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### Access to Boat Ramps

<table>
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<th>Orcas</th>
<th>San Juan</th>
<th>Shaw</th>
<th>PERCENT</th>
<th>Lopez</th>
<th>Orcas</th>
<th>San Juan</th>
<th>Shaw</th>
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<tr>
<td>0 - 1</td>
<td>601</td>
<td>295</td>
<td>104</td>
<td>164</td>
<td>20</td>
<td>6%</td>
<td>10%</td>
<td>9%</td>
<td>3%</td>
<td>12%</td>
</tr>
<tr>
<td>1-2</td>
<td>1,419</td>
<td>395</td>
<td>134</td>
<td>840</td>
<td>50</td>
<td>13%</td>
<td>19%</td>
<td>4%</td>
<td>17%</td>
<td>21%</td>
</tr>
<tr>
<td>2 - 3</td>
<td>1,710</td>
<td>408</td>
<td>51</td>
<td>1,120</td>
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<td>24%</td>
<td>1%</td>
<td>23%</td>
<td>22%</td>
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<tr>
<td>3+</td>
<td>6,903</td>
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<td>106</td>
<td>66%</td>
<td>46%</td>
<td>92%</td>
<td>59%</td>
<td>45%</td>
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<tr>
<td><strong>Total</strong></td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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</table>
Water Access Opportunity Areas
Conservation Opportunity Areas

About this Map
This map is a compilation of priority areas identified in the 2008-2014 SJECD Natural Resource Conservation Plan and additional opportunity areas identified through public outreach for the 2009-2019 Isaac County Parks, Trails, and Natural Areas Plan.
Implementation—the Six Year Plan

- **Goal 1**: Parks, Trails and Natural Areas System
- **Goal 2**: Trail Planning and Development
- **Goal 3**: Land Protection
- **Goal 4**: Stewardship and Maintenance
- **Goal 5**: Funding
- **Goal 6**: Partnerships and Collaboration
- **Goal 7**: Community Engagement

*Added bonus: data are being used for the Shoreline Master Program update!*
Special Thanks

Special thanks are offered to the numerous citizens who provided input and thoughtful feedback throughout the planning process through participation in interviews, surveys, and community events. The plan strives to chart a clear path for San Juan County to meet the myriad needs identified through the planning process.
Questions and Contact Information

www.co.san-juan.wa.us/Parks/docs/FINAL_San_Juan_Parks_Trails_Natural_Areas01_2011.pdf

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