

San Juan County Comprehensive Plan Update

Economic Analysis of Resource Lands

DECEMBER 2017





Community Attributes Inc. tells data-rich stories about communities that are important to decision makers.

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EXECUTIVE SUMMARY

Resource lands include agricultural, forest, and mining lands. These lands exist throughout the San Juan Islands (**Exhibit I1**) and are governed by the San Juan County Comprehensive Plan, as well as other local and Washington State policy frameworks. The County is currently updating its Comprehensive Plan, and is evaluating the need to update its resource lands policy. Specifically, the Growth Management Act (GMA) requires that San Juan County review its resource land designations and ensure their suitability to preserve agriculture, forest and mining lands of long-term commercial significance. This economic analysis of resource lands offers context for the update process.

There are currently about 13,900 acres of designated agricultural resource land, and about 18,900 acres of forest resource land in San Juan County. These lands were designated based on criteria adopted in the San Juan County Comprehensive Plan. As conditions have changed, some of these lands still meet the criteria for resource land designation, though some no longer meet all of the criteria. Additionally, some lands that are not currently designated as resource lands, now meet criteria for resource lands designation. Often, agricultural production and forestry take place on other rural lands (i.e. those not designated as resource lands), as seen in **Exhibit I1**.

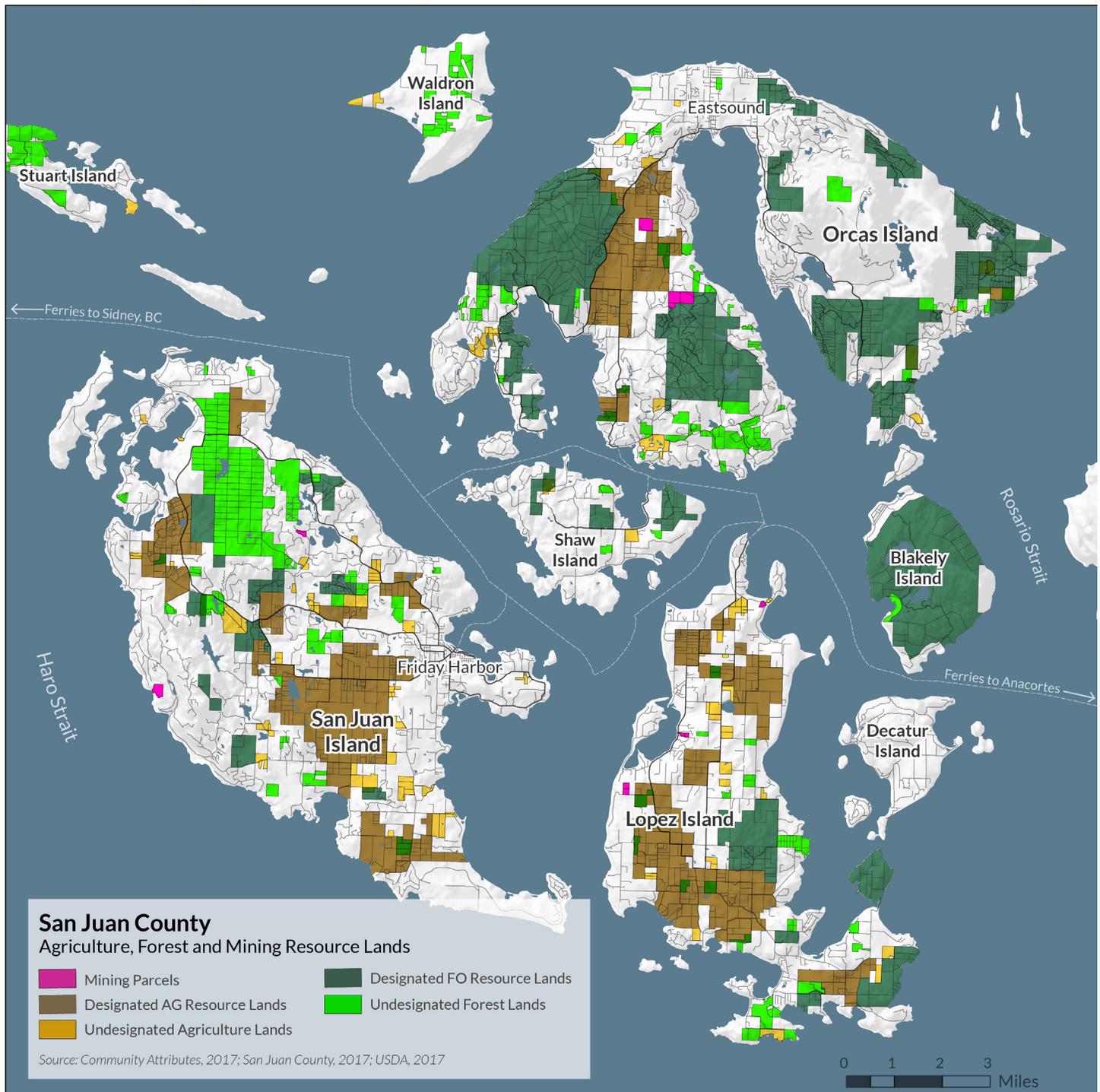
The San Juan County Comprehensive Plan does not currently have a designation for mining resource lands. There are seven active surface mining permits in San Juan County, and about 215 acres of land in use for mining.

Resource lands, and their implications for food security, environmental quality, landscape aesthetics, rural character and local heritage, are very important to San Juan County residents. For example, in a survey conducted for the visioning process during this Comprehensive Plan update, 81% of 189 survey respondents from San Juan County indicated that preserving agricultural land was a “high” priority. In comparison, only 10% and 16% of respondents indicated that increasing land for businesses or housing, respectively, constituted a high priority. The same survey resulted in dozens of written comments related to the role of forest lands, and broadly indicated that responsible forestry practices are critical both to the health of the Island’s ecosystems and the highly-valued rural character of the land. Based on the findings of the visioning report, San Juan County residents see resource lands designation of one vehicle for the preservation of a productive, rural landscape that offers revenue to resource-related enterprises while improving the health of the Islands’ soil and water and ensuring food, recreation, pastoral beauty and other benefits to local residents.



San Juan County contains more than 33,000 acres of designated Agriculture and Forest Resource and permitted mining lands. Much of this land contributes to the rural and pastoral character of the islands. Many parcels that are not designated as resource lands, included those pictured above on San Juan Island, also have forests or agricultural activities.

Exhibit I1. Map of San Juan County Resource Lands, 2017



ORGANIZATION OF THIS REPORT

For the purposes of this report, each resource land type is evaluated in a different section of the report. The major sections within this report are:

- Agriculture Resource Lands
- Forest Resource Lands
- Mining Resource Lands

Each major section contains an executive summary and introduction, a background report that reviews key policy parameters, relevant recent case law and outlines current resource lands in San Juan County, a quantitative and qualitative assessment, including themes from stakeholder engagement, of the economic vitality of the resource industry, and a discussion of policy implications and suggestions for additions or revisions, as appropriate, to Comprehensive Plan goals and policies.



AGRICULTURE RESOURCE LANDS

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AGRICULTURE IN SAN JUAN COUNTY

EXECUTIVE SUMMARY

San Juan County currently contains approximately 15,700 acres of land in current agricultural, or agriculture-related, use. Of those, about 89%, or 13,900 acres, are on designated resource lands (AG), as determined by the Comprehensive Plan.

Agricultural workers represent less than 3% of San Juan County employment, with many of the agricultural operations oriented toward tourism and small-farm production. San Juan County's agriculture sector today is characterized by a larger number of smaller farms, as compared to previous decades. Both the number of farms and the total employment are either increasing, or projected to increase, in San Juan County in the coming years.

Input from stakeholders, including farm proprietors, indicates that most farms are not single-use, and benefit from diversified and non-farm revenue streams to supplement farm income. Taken together with findings in the Visioning report about the cultural importance of local agriculture, agricultural resource lands are economically viable in specific circumstances and have value that transcends farm activities. These lands are likely to remain an important component of agricultural production in San Juan County.

INTRODUCTION

San Juan County is currently updating its Comprehensive Plan, and as part of that effort, the County will review its current resource lands policy. This report evaluates the economic vitality of agriculture, summarizes the results of outreach to key industry stakeholders, and provides goal and policy recommendations for the Comprehensive Plan update.

METHODS

This report presents qualitative and quantitative analysis based on stakeholder perspectives and economic and land use data. Quantitative analyses involved secondary research and data gathering from Washington Department of Natural Resources, Washington Employment Security Department, U.S. Bureau of Labor Statistics, and others. Qualitative analyses are based on a series of interviews, as well as in-person studios and workshops conducted on San Juan, Orcas and Lopez islands. Findings and recommendations for policy are based on a synthesis of the data presented in the report.

ORGANIZATION OF THE REPORT

This report is organized into the following sections:

- Agriculture Policies in San Juan County – this section provides contextual information on policy frameworks that govern agricultural lands in San Juan County and Washington state, as well as recent case law pertaining to the designation and de-designation of agricultural lands.
- Economic Measures of Agriculture in San Juan County – this section presents qualitative and quantitative findings related to jobs, wages, land and business characteristics, and industry challenges and opportunities for agricultural operations.
- Economic Viability of Agriculture in San Juan County – this section applies a set of criteria to evaluate the economic viability of agricultural operations and agricultural resource lands.

- Implications for Agricultural Resource Land Policy – this section details the land use requirements to meet anticipated growth in agriculture, as well as recommendations for Comprehensive Plan goals and policies, based on the data presented in the report.

AGRICULTURE POLICIES IN SAN JUAN COUNTY

This section of the report identifies current agricultural resource lands in San Juan County and provides an overview of the regulatory and policy frameworks that govern them.

APPLICABLE REGULATIONS, RULES AND OTHER CONSIDERATIONS

Under Washington State’s Growth Management Act (GMA), counties must establish requirements for classifying resource lands. Counties are required to designate agricultural lands that “are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products” (RCW 36.70A.170). Agricultural parcels cannot be subdivided to a size smaller than is feasible for productive agricultural uses. The GMA also has established “right to farm” standards to protect farmers from nuisance lawsuits related to standard farming practices conducted on agricultural lands, as these lawsuits can otherwise limit the productivity of valuable lands or promote their conversion.

San Juan County’s current comprehensive plan goals and policies focus on the identification and preservation of agricultural lands of long term commercial significance. According to the designation criteria contained in the San Juan County Comprehensive Plan, agricultural lands may be designated as “Agricultural Resource Lands” if they are at least ten acres in size, and feature soils that support long term commercial agricultural production, or are under a conservation easement for agricultural use or are enrolled in the Open Space-Agriculture taxation program.

Allowable uses on Agricultural Resource Lands are limited to those consistent with agricultural preservation purposes and are codified in the County’s zoning matrix. Certain cottage industries and other alternate uses are permitted, provided they do not interfere with agricultural uses. Open Space Conservation District regulations also apply to Agricultural Resource Lands within the County.

RELEVANT GROWTH MANAGEMENT CASE LAW

Growth management issues are regularly resolved in a legal forum, often by the Growth Management Hearings Board (GMHB). The GMHB was created by RCW 36.70A.250 in 1990 to make informed decisions on appeals arising from the implementation of the Growth Management Act in a clear, consistent, timely and impartial manner. The Board recognizes the environmental differences in resource land management between regions within Washington, and makes decisions according to local circumstances. The following cases represent recent GMHB findings related to the designation and de-designation of agricultural lands in Washington.

- **16-2-0005c - Clark County Citizens United, Inc. v. Clark County**

Clark County’s 2016 Comprehensive Plan Update was found to be non-compliant with RCW 36.70A by the GMA Hearings Board. At issue was the County’s expansion of the UGA and industrial land bank sites on agricultural lands of long-term commercial significance. Important factors in the Board’s decision related to the de-designation of agricultural lands and the lack of need of such lands for population and employment growth. The agricultural lands were found to be productive, and the Board found that Clark County was simultaneously rezoning low density rural lands to higher density rural lands.

- **14-1-0003 - Futurewise v. Benton County**

The City of Kennewick expanded its UGA (Resolution 2014-191) by de-designating 1,263 acres of agricultural lands of long-term commercial significance, located in unincorporated Benton County. The land was viewed as being more developable than land currently in the UGA. The City was challenged by a local land use advocacy group, Futurewise. Benton County’s action was found “not consistent with the Growth Management Act’s requirement to base the addition on planned population growth and violated the GMA’s goals and requirements to protect agricultural lands and prevent developmental sprawl”.

- **12-3-0010 - Snohomish County Farm Bureau v. Snohomish County**

In adopting changes to its Comprehensive Plan in 2012 (Amended Ordinance 12-047), Snohomish County amended its Land Use and

Natural Environment Chapters to link habitat restoration for anadromous fish with preservation of agricultural lands. The Snohomish County Farm Bureau challenged the County's action as creating an implicit exception to the requirement to conduct a de-designation process prior to any restoration action which will inundate and destroy farm land. The challenge was dismissed after the Farm Bureau failed to carry its burden of proof.

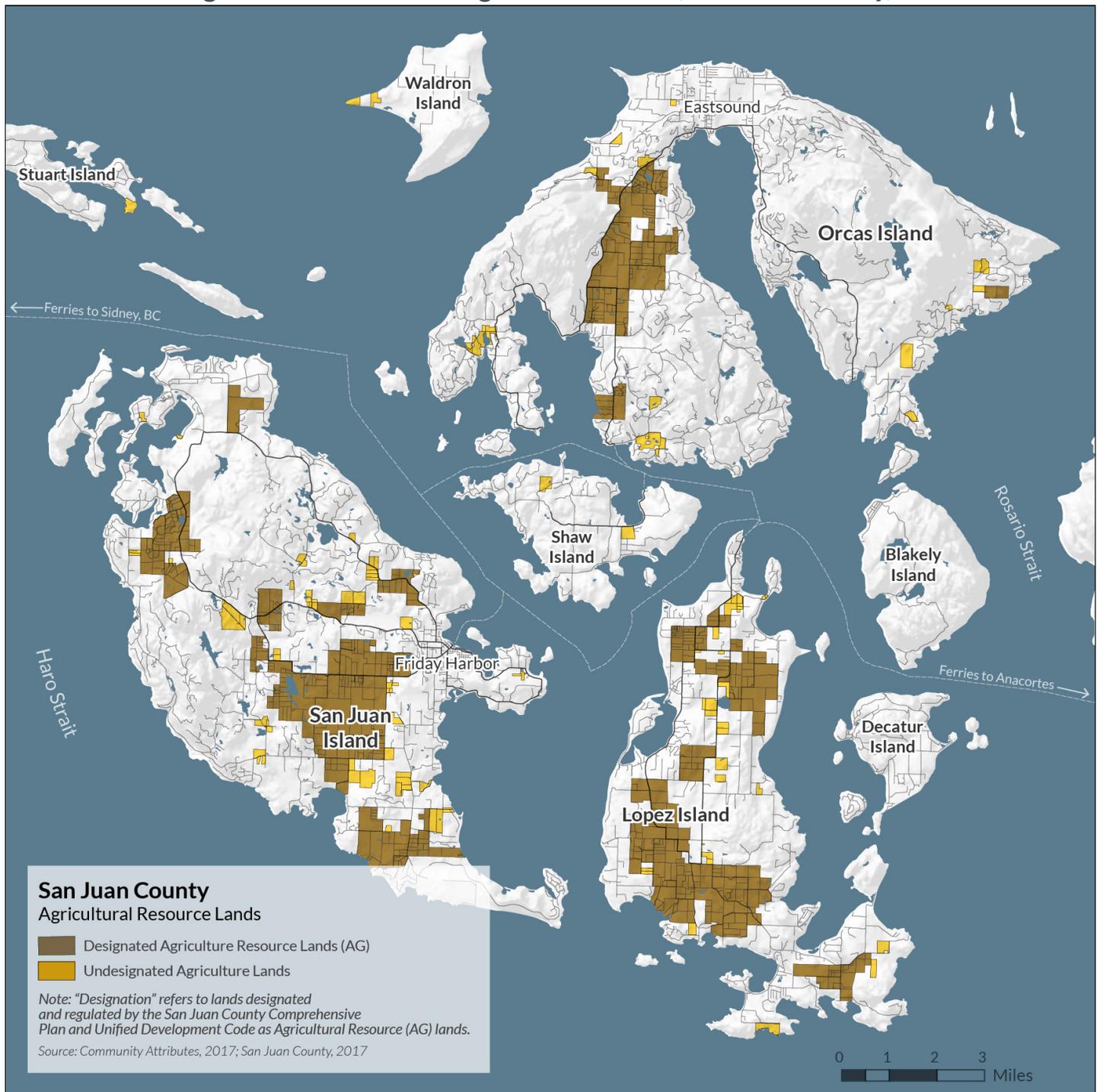
- **07-2-0027 - John Karpinski, Clark County Natural Resources Council and Futurewise v. Clark County**

In 2007 Clark County de-designated 4,351 acres of designated agricultural lands of long-term commercial significance. The County was challenged based on its environmental review, public participation process and addition of said lands into the County UGA. After initially finding noncompliance, the GMHB found that Clark County addressed outstanding issues and has now achieved compliance, and the order of invalidity has been rescinded. The County was found to have gone through a de-designation process, utilizing a principle/values statement that put economic development as its primary goal.

EXISTING AGRICULTURE RESOURCES

San Juan County currently contains approximately 15,700 acres of land in current agricultural, or agriculture-related, use. Of those, about 89%, or 13,900 acres, are on designated resource lands (AG), as determined by the Comprehensive Plan. The map below (**Exhibit A1**) illustrates the location of these designated AG lands and current use agricultural lands within San Juan County. These lands are the subject of this report.

Exhibit A1. Designated AG Lands and Agricultural Lands, San Juan County, 2017



ECONOMIC MEASURES OF AGRICULTURE IN SAN JUAN COUNTY

This section of the report includes characteristics of the agricultural economy in San Juan County, including measures of employment, wages, revenues and other economic indicators. Some of these indicators are applied as economic viability metrics in order to produce an assessment of the economic competitiveness of San Juan County agricultural lands.

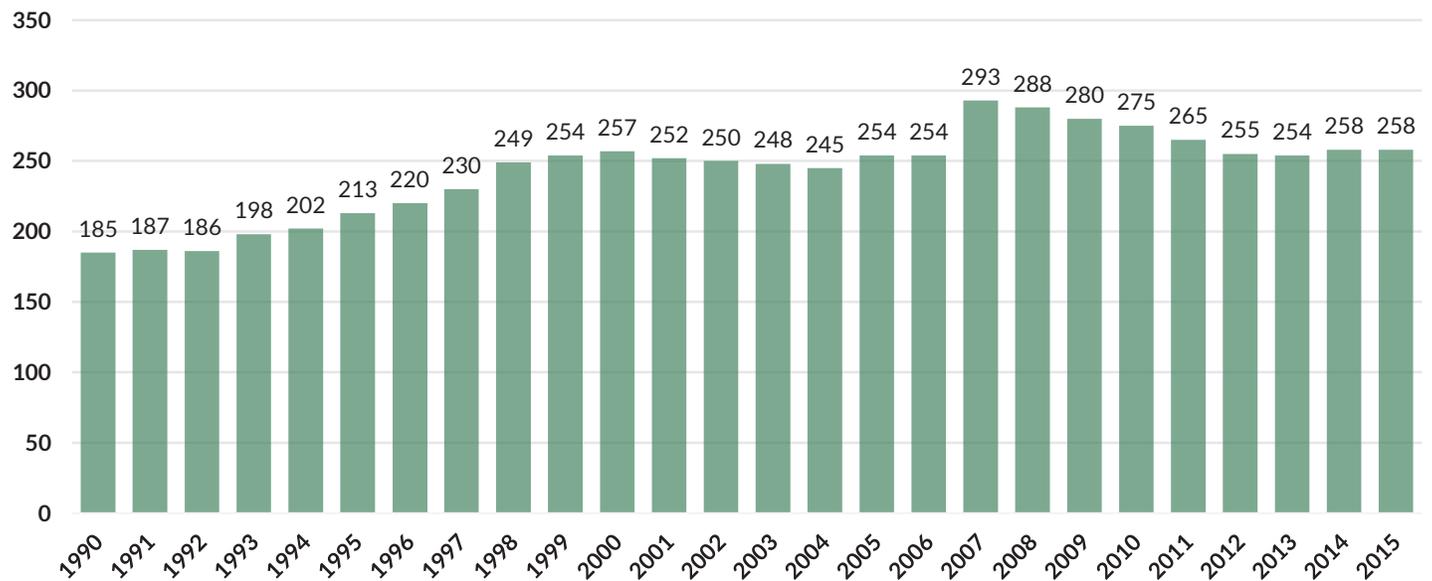
LEADING EMPLOYERS AND ACTIVITIES

There were 258 jobs in agriculture in San Juan County in 2015; industry employment averaged 262 jobs between 2001 and 2015 (**Exhibit A2**). Agricultural workers represented 2.3% of San Juan County employment in 2015 (**Exhibit A3**). Many of the agricultural operations in San Juan County are oriented towards tourism and

small-farm production, and represent many of the signature open spaces on the islands. Local farms are part of the local food supply system, with produce sold at local farmers markets—a popular destination for residents and visitors alike. Farm tours also attract visitors. Agricultural operations such as San Juan Island’s Pelindaba—a large lavender farm featuring active lavender cultivation and a retail business for value-added products—are shaping new “island-scale” product markets and attracting visitors from the mainland.

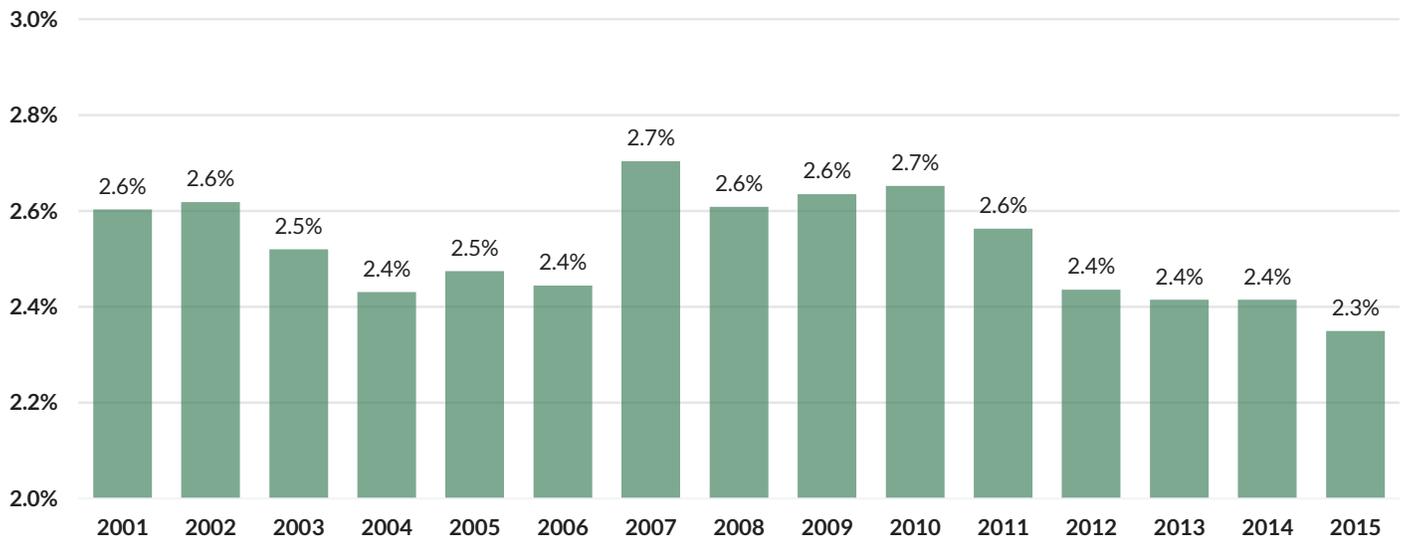
San Juan County is home to the first USDA-approved mobile processing unit on the West Coast (established in 2002). The mobile unit has helped livestock producers overcome regulatory barriers, expand product offerings and increase sales. This type of innovation and value-added effort offers a model for future growth in the industry on the island for small producers.

Exhibit A2. Employment in Agriculture, San Juan County, 1990-2016



Sources: U.S. Bureau of Economic Analysis, 2017; Community Attributes Inc., 2017.

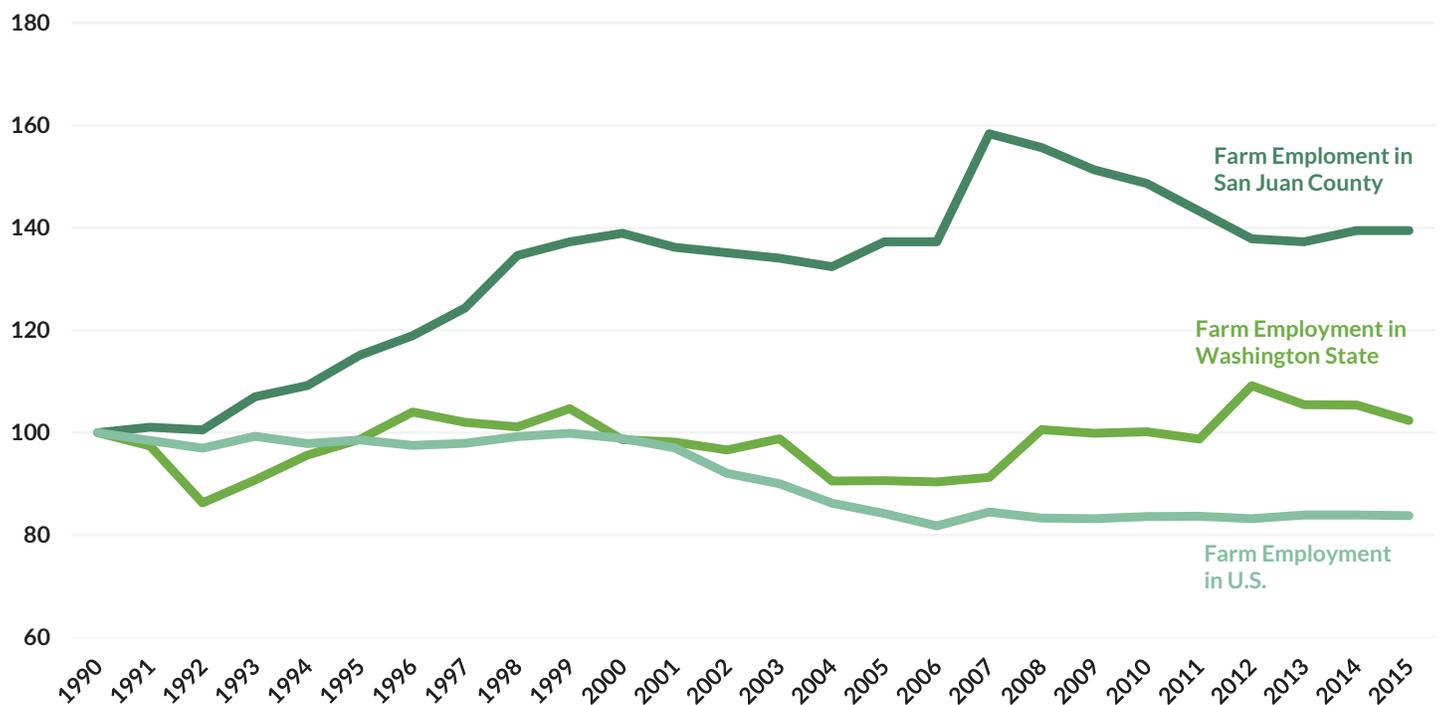
Exhibit A3. Agriculture Share of Total Employment, San Juan County, 2001-2015



Sources: U.S. Bureau of Economic Analysis, 2017; Community Attributes Inc., 2017

Since 1990, agriculture in San Juan County has grown by about 39.5% (1.3% average annual growth). This rate of growth is higher than the average across Washington state (2.4% total growth) and the United States (-0.7%) (Exhibit A4).

Exhibit A4. Exhibit 4. Indexed Cumulative Change in Employment, Agriculture and Other Major Sectors, San Juan County, 1990-2016



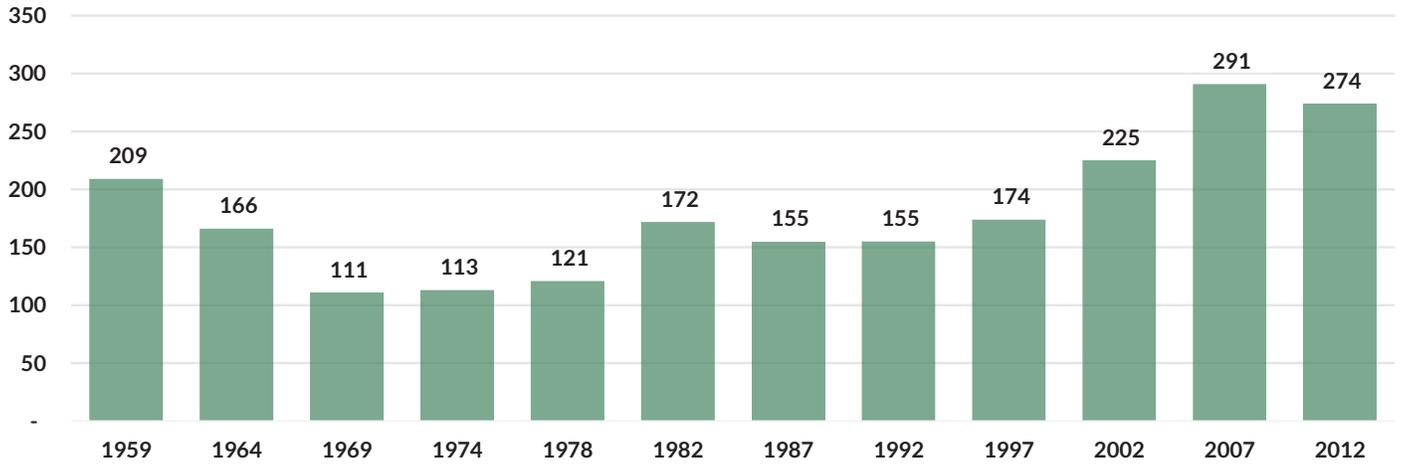
Sources: U.S. Bureau of Economic Analysis, 2017; Community Attributes Inc., 2017.

FARM CHARACTERISTICS

There were 274 farms in San Juan County in 2012 (the most recent year of publication for the U.S. Agriculture Census); this is down slightly from 291 farms reported in

2007, but still higher than the number of farms reported in the Census since 1959 (**Exhibit A5**). Generally, the number of farms has been increasing in San Juan County.

Exhibit A5. Number of Farms, San Juan County, 1959-2012

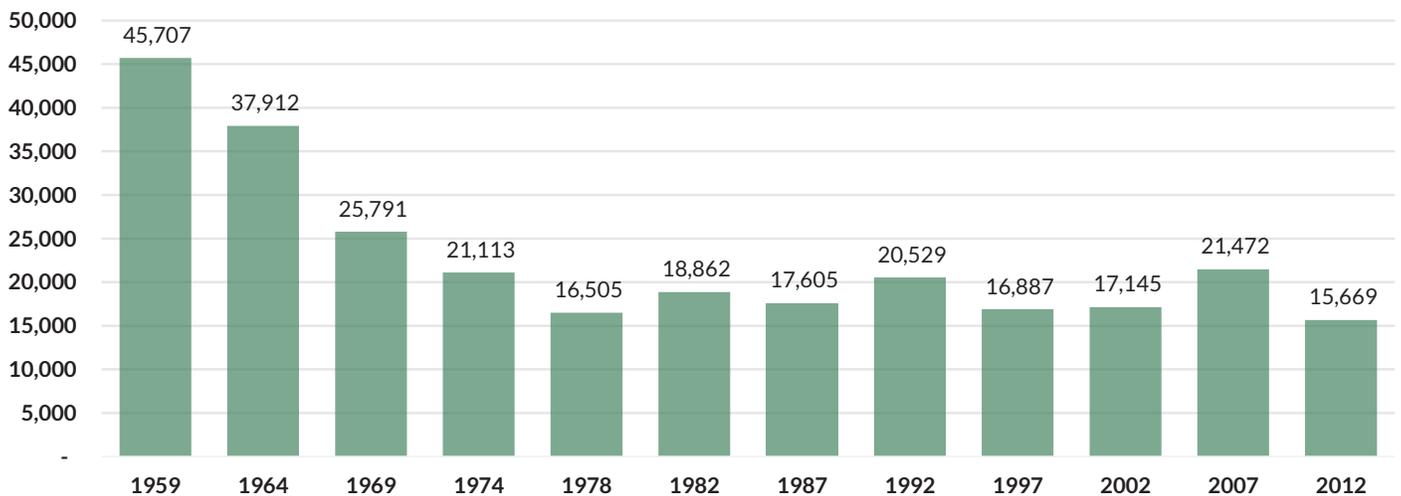


Sources: United States Department of Agriculture, 2017; Community Attributes Inc., 2017.

Total farm acreage in the County in 2012 was 15,669 acres. The number of acres in farming in 2012 was down from 21,472 acres in 2007, but has generally been steady

since 1974. Prior to 1974, there was a significantly larger number of acres in farming (**Exhibit A6**).

Exhibit A6. Land in Farms (acres), San Juan County, 1959-2012

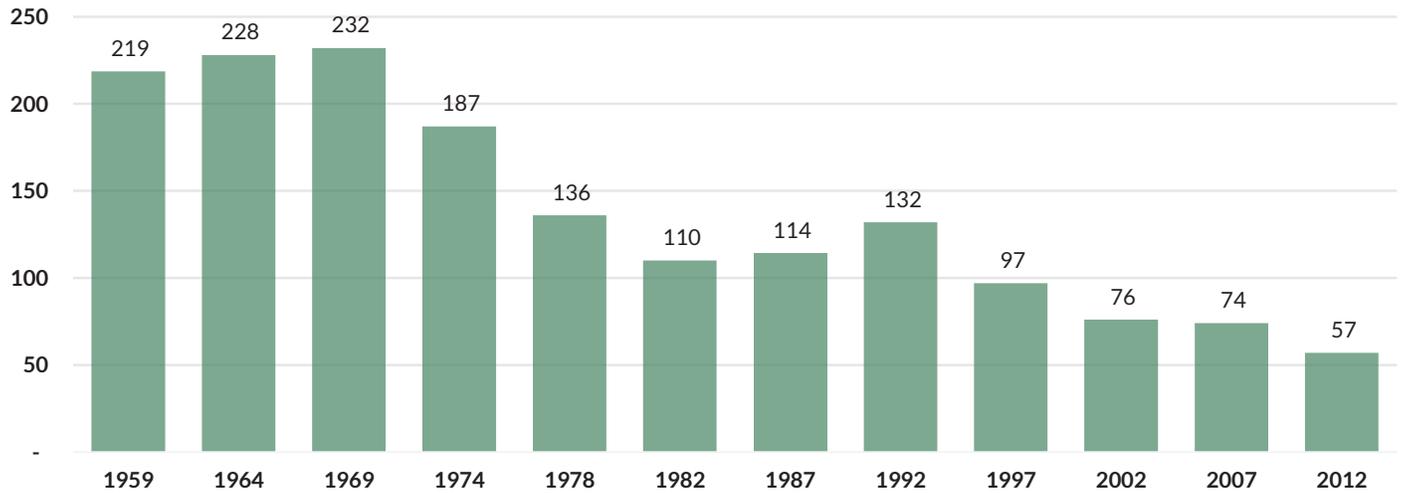


Sources: United States Department of Agriculture, 2017; Community Attributes Inc., 2017.

Average farm size has been in decline since 1992, falling from 132 acres per farm to 57 acres in 2012 (**Exhibit A7**). In the past fifty years, the average size of farms has decreased by a factor of four. San Juan County's agriculture sector today is therefore characterized by a larger number of smaller farms, as compared to previous decades.

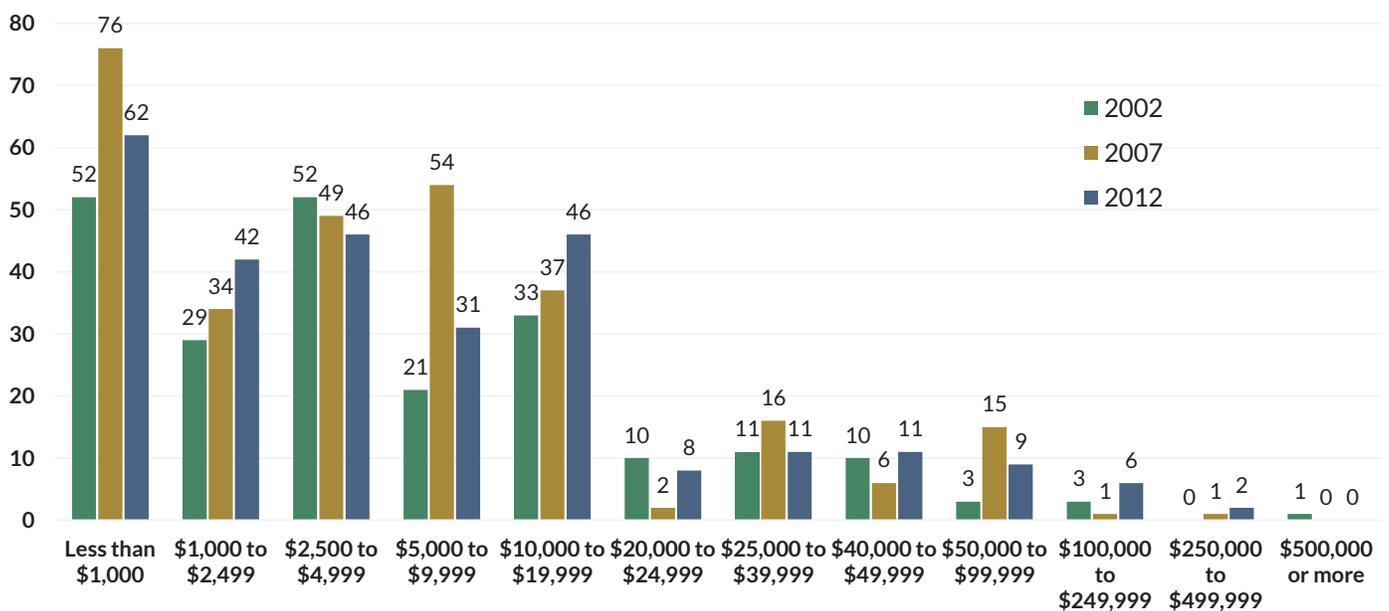
More than 80% of operating farms generated sales of less than \$20,000 a year. According to the 2012 U.S. Agriculture Census, there were only two farms that earned between \$250,000 and \$500,000 in sales in San Juan County, and none above this level (**Exhibit A8**).

Exhibit A7. Average Size of Farms (acres), San Juan County, 1959-2012



Sources: United States Department of Agriculture, 2017; Community Attributes Inc., 2017.

Exhibit A8. Number of Farms by Value of Sales, San Juan County, 2002, 2007, 2012



Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

Farm income includes cash receipts from the sales of crops and livestock, and other income such as government payments and miscellaneous sources. In 2015, farm

income totaled \$7.1 million, represented in 2017 dollars. This was a 17% increase over 2014 (**Exhibit A9**).

Exhibit A9. Farm Income (including cash receipts and other sources), San Juan County, 2000-2015 (Millions \$2017)



Sources: U.S. Bureau of Economic Analysis, 2017; U.S. Federal Reserve Bank of St. Louis, 2017; Community Attributes Inc., 2017.

The largest source of farm income is cash receipts from the sale of crops and livestock. In 2015, farmers in San Juan County experienced the highest historic level of cash receipts sales, reaching \$5.1 million (**Exhibit A10**).

Some of this increase may be due to an increase in the production of value-added products and improved access to local markets through farm stands, farmer’s markets and other similar programs.

Exhibit A10. Crop and Livestock Cash Receipts, San Juan County, 2000-2015 (Million \$2017)



Sources: U.S. Bureau of Economic Analysis, 2017; U.S. Federal Reserve Bank of St. Louis, 2017; Community Attributes Inc., 2017.

The total market value of agriculture products sold in San Juan County was \$4.2 million (**Exhibit A11**) in 2012, ranking the county 37 out of 39 in Washington state. The

three largest commodity groups by value of sales in 2012 were vegetables, melons, potatoes and sweet potatoes; cattle and calves; and other crops and hay (**Exhibit A12**).

Exhibit A11. Market Value of Agricultural Products Sold, San Juan County, 2002 - 2012

Item	2012		2007		2002	
	Quantity (millions \$)	State Rank (of 39)	Quantity (millions \$)	State Rank (of 39)	Quantity (millions \$)	State Rank (of 39)
Total value of agricultural products sold	\$4.2	37	\$3.6	35	\$3.1	38
Value of crops including nursery and greenhouse	\$2.6	34	\$1.7	33	\$1.1	36
Value of livestock, poultry, and their products	\$1.7	37	\$1.9	36	\$2.0	38

Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

Exhibit A12. Value of Sales by Commodity Group, San Juan County, 2002 - 2012

Item	2012		2007		2002	
	Quantity (thousands \$)	State Rank (of 39)	Quantity (thousands \$)	State Rank (of 39)	Quantity (thousands \$)	State Rank (of 39)
Grains, oilseeds, dry beans, and dry peas	(D)	31	(D)	32	(D)	(D)
Tobacco	-	-	-	-	-	-
Cotton and cottonseed	-	-	-	-	-	-
Vegetables, melons, potatoes, and sweet potatoes	\$835	24	\$408	27	\$58	32
Fruits, tree nuts, and berries	\$452	29	\$895	24	(D)	(D)
Nursery, greenhouse, floriculture, and sod	\$569	23	\$182	32	\$303	31
Cut Christmas trees and short rotation woody crop	-	-	(D)	33	\$4	29
Other crops and hay	\$669	28	(D)	34	\$249	33
Poultry and eggs	\$31	28	\$60	23	\$11	29
Cattle and calves	\$739	36	\$845	35	\$587	35
Milk from cows	\$160	28	\$48	31	\$31	30
Hogs and pigs	\$75	19	\$41	22	(D)	(D)
Sheep, goats, wool, mohair, and milk	\$147	19	\$299	6	\$170	11
Horses, ponies, mules, burros, and donkeys	\$180	22	\$52	35	\$45	33
Aquaculture	\$285	25	\$468	23	(D)	(D)
Other animals and other animal products	\$45	28	\$116	21	\$476	9

Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

In 2012, the top crop item by acreage in San Juan County was “forage-land used for all hay and haylage, grass silage, and greenchop” with 3,922 total acres (**Exhibit A13**), while the three largest livestock inventory items were cattle

and calves, layers (or egg-laying poultry birds for the purpose of commercial egg production), and sheep and lambs (**Exhibit A14**).

Exhibit A13. Top Crop Items by Acreage, San Juan County, 2002 - 2012

Item	2012		2007		2002	
	Quantity (acres)	State Rank (of 39)	Quantity (acres)	State Rank (Among the 39 state)	Quantity (acres)	State Rank (Among the 39 state)
Forage-land used for all hay and haylage, grass silage, and greenchop	3,922	30	5,233	28	4,174	30
Vegetables harvested, all	(D)	27	75	18	(D)	16
Barley for grain	(D)	25	52	19	71	18
Wheat for grain, all	45	30	49	29	53	4
Spring wheat for grain	45	27	(D)	26	28	12

Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

Exhibit A14. Top Livestock Inventory Items, San Juan County, 2002 - 2012

Item	2012		2007		2002	
	Quantity (number)	State Rank (of 39)	Quantity (number)	State Rank (of 39)	Quantity (number)	State Rank (of 39)
Cattle and calves	1,795	36	3,013	3	2,731	5
Layers	1,625	27	2,451	35	2,333	35
Sheep and lambs	1,026	19	2,265	19	1,237	20
Horses and ponies	321	34	395	34	820	5
Goats, all	249	31	363	16	347	34

Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

QUALITATIVE ASSESSMENTS OF AGRICULTURAL LANDS IN SAN JUAN COUNTY

In addition to the quantitative analyses presented in the previous section, this report is also based on robust stakeholder outreach aimed at agricultural producers and landowners. This outreach included stakeholder interviews, an online survey and an online map-based comment platform, and a series of workshops and pop-up studios on San Juan, Orcas and Lopez islands. Key findings pertaining to the economic viability of agricultural lands, as well as suggestions from stakeholders to bolster the economic competitiveness of agriculture in San Juan County, are presented below.

- Understand and respect the long-standing and deep-rooted cultural attachment to resource-related industries on the San Juan Islands, especially to agriculture, which is particularly valued for its contributions to the local food production ecosystem and value-added offerings.
- Encourage agricultural activities that produce healthy food in sustainable ways; evaluate policies that encourage organic, GMO-free produce and permaculture or other production methods that enrich soils, recharge aquifers, sequester carbon and generally produce positive environmental externalities.
- Adapt policy to reflect the needs of smaller and shared agricultural operations, which are important to defray the cost of land in San Juan County, where demand for large-lot residences drives land prices up.
- Understand and account for the added costs (e.g. off-island transportation) that apply to export-oriented extractive and value-added resource-related operations in San Juan County; encourage the development of local markets for raw and value-added agricultural products
- Acknowledge positive externalities not directly associated with agriculture (such as revenues and employment related to tourism) that partially rely on the rural and pastoral character of the islands.
- In conjunction with policies that encourage sustainable agricultural practices, consider explicitly including a valuation of ecosystem services (versus economic development or similar) for future processes related to the designation or de-designation of agricultural lands.
- Support and encourage shared, cooperative and other non-traditional models for agricultural production that decrease the burdensome cost of private land acquisition for individual producers.
- Review regulations on accessory structures on agricultural land, and allow for farmworker housing as long as the impact of structures on the landscape is mitigated (e.g. structures are clustered on a small portion of the property, building heights are regulated).
- Clarify regulations on farm stands to ensure that farm stands are legal, particularly along frontages on major transportation corridors, and can be maintained by multiple producers from separate tracts of land.
- Strengthen or reaffirm right-to-farm protections.
- Relax regulations on farm-related and accessory facilities (e.g. commercial kitchens, composting facilities) that are stricter than statewide standards.
- Review and revise, where necessary, fencing regulations to allow for more multispecies grazing and land-sharing arrangements between farmers.
- There is a need for a larger, possibly statewide conversation about water rights, and a Countywide dialogue about water use for agriculture.

Ongoing conversations with a broader range of stakeholders (i.e. the County population at large, rather than the subset of agricultural producers and landowners) using an online survey and in-person workshops and studios revealed widespread appreciation for local agriculture and a commitment to maintaining San Juan County's agricultural economy.

Several respondents indicated that there is interest from younger generations in working in agriculture, though demographic data from the U.S. Census of Agriculture indicates that farm operators in San Juan County are older than the statewide average (**Exhibit A15**). These data also indicate that about 53% (as opposed to about 47% statewide) of principal farm operators count farming as their primary occupation, and only 60% (as opposed to about 80% statewide) of farmers in San Juan County are male.

Exhibit A15. Demographic Characteristics of Principal Farm Operators, San Juan County and Washington State, 2012

Characteristic	San Juan County		Washington State	
	Quantity	Percent	Quantity	Percent
Principal Operators by Primary Occupation				
Farmer	145	52.9%	17,650	47.4%
Other	129	47.1%	19,599	52.6%
Principal Operators by Sex				
Male	164	59.9%	29,730	79.8%
Female	110	40.1%	7,519	20.2%
Average Age of Principal Operator	60.0	N/A	58.8	N/A

Source: U.S. Census of Agriculture, 2012; Community Attributes Inc., 2017

ECONOMIC VIABILITY OF AGRICULTURE IN SAN JUAN COUNTY

Viable lands are those in productive agricultural use, capable of generating revenues based on agricultural products, or otherwise of long-term commercial significance. Resource lands may have value outside of these economic viability criteria, such as for ecosystem services and habitat or for aesthetic quality. The criteria used to assess economic viability in this report are described in detail below.

VIABILITY CRITERIA

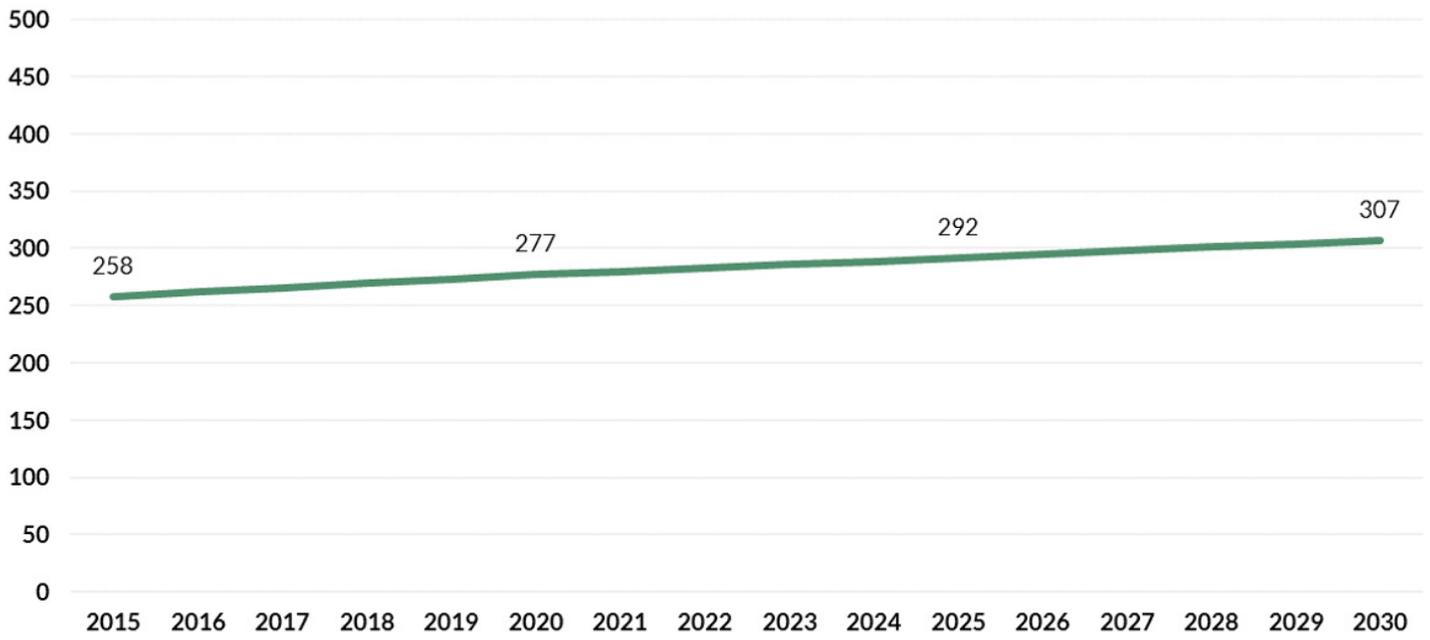
Economic viability for agriculture in San Juan County takes into consideration how the industry compares against a normalized benchmark, in this case Washington State. The metrics below assess San Juan County’s agriculture’s performance across the following categories:

- Relative economic performance of San Juan County farms
- Anticipated growth in agricultural employment

FUTURE GROWTH IN AGRICULTURE

Future growth of agricultural employment in San Juan County is estimated based on the compound annual growth rate of agricultural employment in Northwest Washington (Island, San Juan, Skagit and Whatcom counties) from the Washington State Employment Security Department (ESD). Agricultural employment in San Juan County is projected to increase at a compound annual growth rate of 1.5% per year through 2020, followed by growth of just over 1.0% annually from 2020 through 2025. The forecast from ESD assumes that this rate will hold through 2030 (**Exhibit A16**).

Exhibit A16. Forecast of Agriculture Employment, San Juan County, 2015-2030



Source: Washington State Employment Security Department, 2017; Community Attributes Inc., 2017.

VIABILITY ASSESSMENT

ECONOMIC PERFORMANCE

With smaller and fewer farms in San Juan County than the statewide average, agricultural production in the County ranks lower than most other counties in Washington State. About 73% of all farms in San Juan County are less than 50 acres in size, compared to about 63% statewide, and about 1.5% of farms in San Juan County are 500 acres or larger, compared to about 11% statewide (**Exhibit A17**). On a normalized basis, controlling for farm size, market value and sales for San Juan County farms are lower per acre than the statewide average as well (**Exhibit A18**). However, San Juan County outperforms the statewide average in certain commodity groups on a per-acre basis (**Exhibit A19**), including in the following commodities:

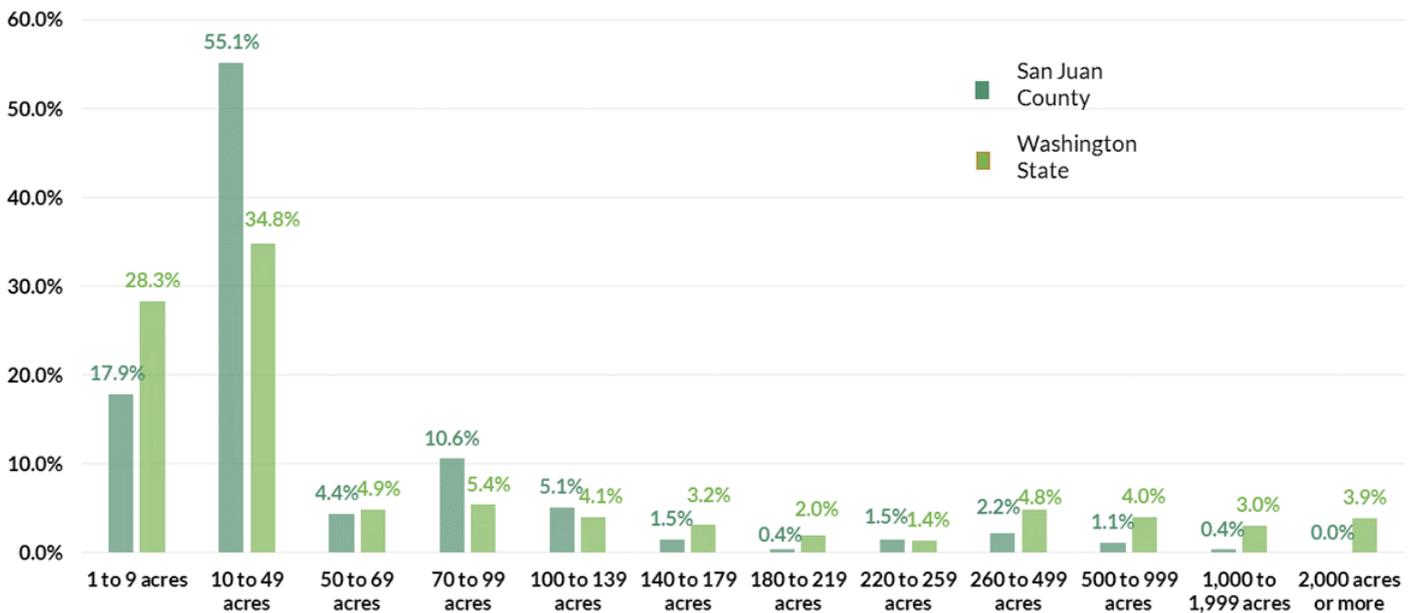
- Nursery, greenhouse, floriculture and sod
- Hogs and pigs
- Sheep, goats, wool, mohair and milk
- Horses, ponies, mules, burros and donkeys
- Aquaculture

Furthermore, both the number of farms and the total employment are either increasing, or are projected to increase, in San Juan County in the coming years (**Exhibits A5 and A16**). Stakeholder feedback indicates that most farms are not single-use, and benefit from diversified and non-farm revenue streams to supplement farm income. Taken together with additional feedback about the cultural importance of local agriculture, agricultural resource lands are economically viable in specific circumstances and are likely to remain an important component of agricultural production in San Juan County.

**Exhibit A17.
County, 2012**

Distribution of Farm by Size of Farm, Washington State and San Juan

Distribution of Farm by Size



Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

Exhibit A18. Market Value and Sales per Acre Comparisons, Washington State and San Juan County, 2012

	Average Market Value of Products Sold Per Acre	Average Crops Sales Per Acre	Average Livestock Sales Per Acre
San Juan County	\$271	\$165	\$106
Washington State	\$618	\$440	\$178
Ratio of SJC to Washington State	43.8%	37.4%	59.5%

Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

**Exhibit A19.
County, 2012**

Value of Sales by Commodity Group, Washington State and San Juan

Item	Value of Sales Per Acre	
	Washington State	San Juan County
Grains, oilseeds, dry beans, and dry peas	\$99.9	-
Tobacco	-	-
Cotton and cottonseed	-	-
Vegetables, melons, potatoes, and sweet potatoes	\$72.2	\$53.3
Fruits, tree nuts, and berries	\$198.8	\$28.8
Nursery, greenhouse, floriculture, and sod	\$22.6	\$36.3
Cut Christmas trees and short rotation woody crops	\$1.3	-
Other crops and hay	\$45.5	\$42.7
Poultry and eggs	\$17.8	\$2.0
Cattle and calves	\$67.5	\$47.2
Milk from cows	\$77.1	\$10.2
Hogs and pigs	\$0.3	\$4.8
Sheep, goats, wool, mohair, and milk	\$0.7	\$9.4
Horses, ponies, mules, burros, and donkeys	\$1.2	\$11.5
Aquaculture	\$12.7	\$18.2
Other animals and other animal products	\$1.1	\$2.9
Total	\$618.4	\$267.2

Sources: U.S. Department of Agriculture, 2017; Community Attributes Inc., 2017.

IMPLICATIONS FOR AGRICULTURAL RESOURCE LAND POLICY

MINIMUM LAND USE REQUIREMENTS FOR AGRICULTURE

The number of acres in use for agricultural production fluctuate year-to-year based on market demand for agricultural products, weather patterns, farmer succession and other factors. Due to these fluctuations, the acreage needed to meet demand for agricultural land is not static. Furthermore, employment density on agricultural lands shifts as farmers choose different crops or work smaller or larger plots. Moreover, agricultural activities can occur on lands that are not designated as agricultural resource lands (e.g. on parcels zoned Rural Farm/Forest).

The fact that there are currently non-designated lands in current use for agricultural production in San Juan County suggests that there is greater demand for agricultural land than there are designated agricultural resource lands. Increasing employment in agriculture, per the ESD forecast, would also potentially create demand for additional agricultural land, whether designated as resource land or not.

STANDARDS FOR RESOURCE LAND DESIGNATION

The following maps (Exhibits A21 and A22) illustrate lands that either are currently designated as agricultural resource lands, and that potentially do not meet the criteria for designation, or lands that are not currently designated as agricultural resource lands, but potentially could meet the criteria for designation. These maps are based on the designation criteria adopted in the San Juan County Comprehensive Plan. The table in Exhibit A20 provides additional detail for these maps.

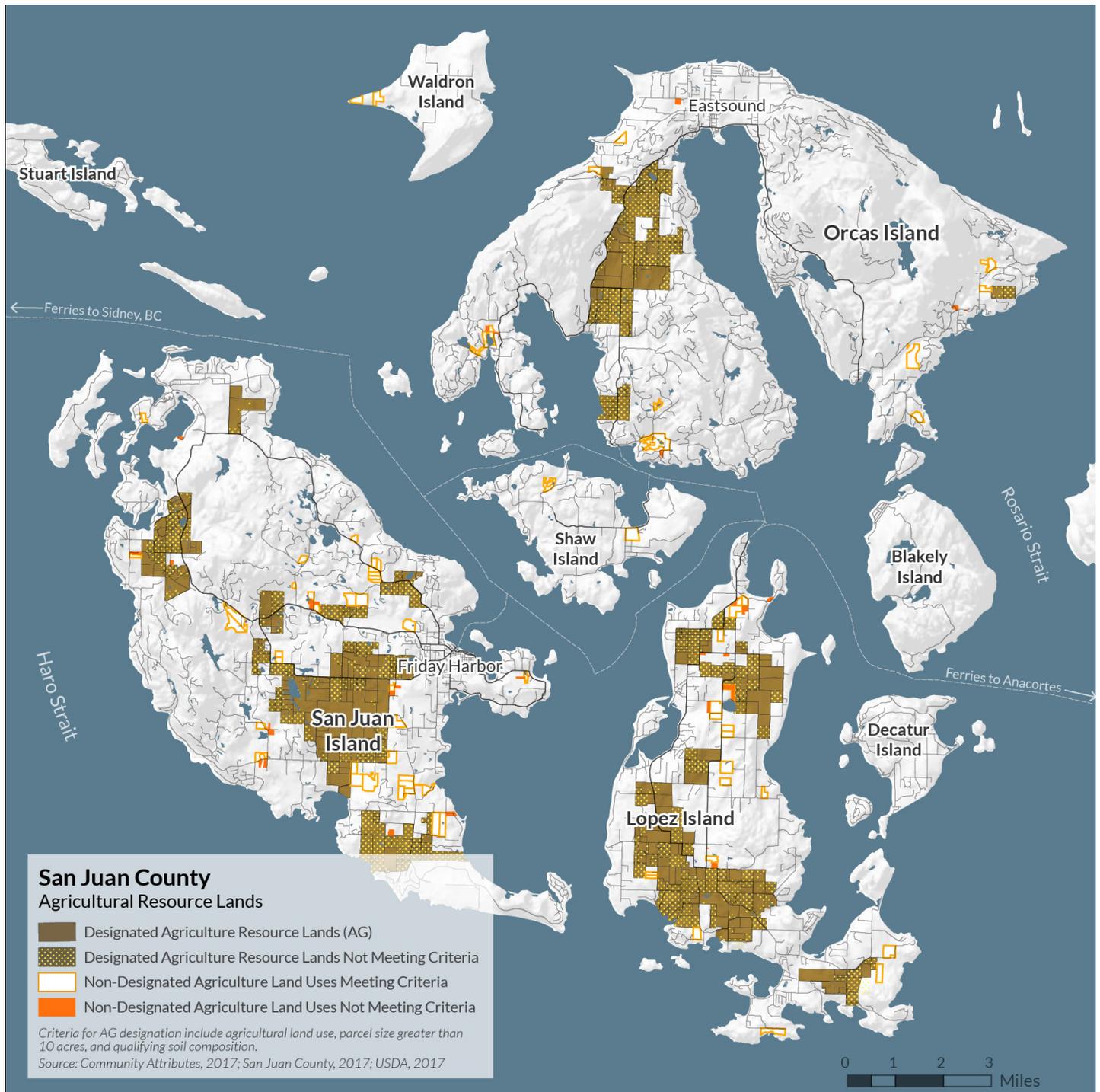
Exhibit A20. Agriculture Lands and Designation Status, San Juan County, 2017

	Total Acres
Designated Agriculture Resource Lands	13,884.2
Designated Agriculture Resource Lands Potentially Not Meeting Criteria	7,879.7
No Agriculture Land Use Recorded by SJC Assessor	6,996.9
Parcel Size Less than 10 Acres	1,423.2
Non-Qualifying Soil Profile	1,734.6
Non-Designated Agriculture Land Uses Potentially Meeting Criteria	2,001.9
Non-Designated Agriculture Land Uses Potentially Not Meeting Criteria	219.4

Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

Exhibit A21.

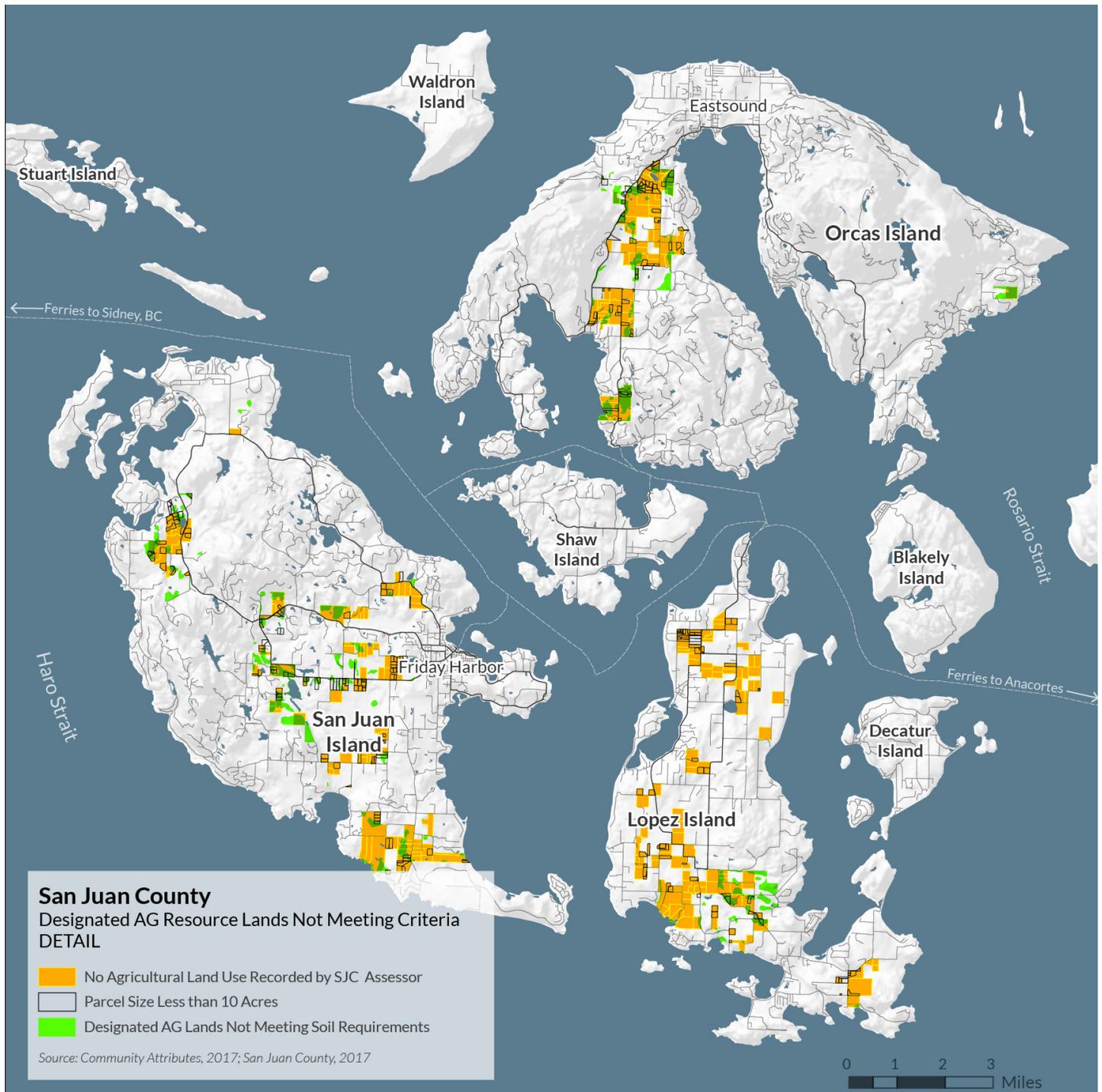
Agriculture Lands and Designation Status Map, San Juan County, 2017



Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

Note: "Criteria" for SJC Agricultural Resource Land designation are stipulated in the adopted San Juan County Comprehensive Plan. Total designated acres potentially not meeting criteria does not equal the sum of acres in the breakout by criteria due to overlap (only 30 of 257 AG designated parcels under ten acres was coded agricultural land use by SJC assessor).

Exhibit A22. Agricultural Lands and Designation Status Detail, San Juan County, 2017



Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

GOAL AND POLICY RECOMMENDATIONS

The existing goal and policy language from the 2010 Comprehensive Plan update is taken from the Land Use Element (B2) and reproduced below, with comments, potential revisions and possible additions. The comments, revisions and additions are based on an understanding of the economic vitality of the resource industry sectors in question, as well as trends in economic viability and input from key stakeholders.

Existing Comprehensive Plan Language	Recommendations
<p>a. Agricultural Resource Lands</p>	<p>General Comments</p> <ul style="list-style-type: none"> • Stakeholders have suggested additional policy language around support for efforts to create and grow local markets for locally-produced products, including a food hub. • Stakeholders suggest strengthening or supporting right-to-farm statutes and industrial/agriculture production. • Consider adding policy language that explicitly supports organizations of agricultural producers and/or report products produced by these producer organizations (e.g. the Voluntary Stewardship Program, the “Growing Our Future” agricultural strategic action plan).
<p>Goal:</p> <p>To ensure the conservation of agricultural resource lands of long-term commercial significance for existing and future generations, and protect these lands from interference by adjacent uses which may affect the continued use of these lands for production of food and agricultural products.</p>	<p>Stakeholders suggest broadening the criteria for conservation of agricultural resource lands beyond “long-term commercial significance”, to include the aesthetic quality and pastoral appearance of the land, the wider economic impacts engendered by this rural character (e.g. within the tourism industry), and ecosystem services such as soil quality, water quality and aquifer recharge, and carbon sequestration. Stakeholders relatedly suggest that incentives be put in place to encourage farming practices that improve the provision of ecosystem services by agricultural producers.</p>

Existing Comprehensive Plan Language	Recommendations
<p>Policies:</p> <p>(1) Lands in agricultural use which are characterized by the following criteria may be designated as Agricultural Resource Lands:</p> <p>i. Areas in parcels of ten acres or larger with soils capable of supporting long term commercial agricultural production. The federal Natural Resources Conservation Service (NRCS) identified 34 soil types suitable for farming in San Juan County. These soils can be found on page 121 of the 2009 Soil Survey of San Juan County, Washington, available at:</p> <p>http://soils.usda.gov/survey/online_surveys/washington/#san2009; or</p> <p>ii. Lands which meet the criteria in a. above which are under conservation easement for agricultural use or which are enrolled in the Open Space-Agriculture taxation program.</p>	<p>The link to the USDA soils report is no longer valid, and the USDA now uses a web-based mapping tool to discover and download soils data. No other changes suggested.</p>
<p>(2) Limit conversion of Agricultural Resource Lands to permanent non-farm uses through implementation of a purchase or transfer of development rights program, special tax assessment programs, conservation easements, and conservation site design options for residential land divisions and boundary line modifications.</p>	<p>Consider revising to the following (or similar) to address stakeholder concerns:</p> <p>(2) Maintain rural character outside of predominantly urban areas by limiting conversion of Agricultural Resource Lands to permanent non-farm uses through implementation of a purchase or transfer of development rights program, special tax assessment programs, conservation easements, and conservation site design options for residential land divisions and boundary line modifications.</p>
<p>(3) Allow cottage enterprises that do not interfere with agricultural use, and allow agriculture-related activities such as processing and limited retailing facilities for locally grown products on farm sites and within agricultural areas consistent with allowances in State law for accessory uses in agricultural resource lands.</p>	<p>This is largely consistent with feedback from stakeholders. Suggest clarifying provisions that allow roadside farm stands. Consider policies that promote more intensive development of ag-related facilities on resource land, provided these facilities are clustered and maintain a small footprint.</p>

Existing Comprehensive Plan Language	Recommendations
<p>(4) Allow farm labor housing and farm stay accommodations subject to specific performance standards on Agricultural Resource Lands.</p>	<p>Stakeholders indicate that farm labor housing remains a challenging issue. Consider evaluating adopted code for sufficiency and implementation. Stakeholders perceive inflexibility in farm labor housing standards.</p>
<p>(5) Limit the location of utility lines and facilities, new roads and road realignments, access routes and other non-agricultural public and private facilities, to the least disruptive locations within agricultural areas.</p>	<p>Consider revising to:</p> <p>(5) Limit the location of utility lines and facilities, new roads and road realignments, access routes and other non-agricultural public and private facilities, to the least disruptive locations within production agricultural areas and areas of distinctive rural character.</p> <p>Alternatively, consider such language in the Rural Lands section of the Comprehensive Plan update. Though 2.3C already contains robust policy direction, many stakeholders expressed the opinion that both production (i.e. resource) and non-productive (i.e. rural) lands need stronger protections from traffic, development, and other urban pressures. 2.3.C.4-6 seem particularly important in this conversation, which may have more to do with perception of policy enforcement than with explicitly adopted policy.</p>



FOREST RESOURCE LANDS

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FORESTRY IN SAN JUAN COUNTY

FORESTRY EXECUTIVE SUMMARY

Forest lands and harvests have historically been a major contributor to the San Juan County economy. Forest lands in San Juan County are used for timber operations, as well as recreational and habitat uses, and provide many ecosystem services. These lands are governed by the San Juan County Comprehensive Plan, the San Juan County Code, the Revised Code of Washington (RCW) and other state and local programs, such as Open Space Taxation. San Juan County's current Comprehensive Plan goals and policies are consistent with the state standard of preserving forest lands of long term commercial significance while also maintaining water quality and quantity and fish and wildlife habitat. Recent GMA Hearings Board cases illustrate some of the recent challenges associated with regulating such lands. The have centered on issues related to the analysis needed to de-designate existing forest land (to other uses); the need for essential public facilities to adhere to development regulations that would impact the supply of resource lands; and, the need to follow GMA public hearing processes to make changes to the status of forest lands.

There are approximately 18,900 acres of designated forest resource land in San Juan County (or about 9% of total County land area). Orcas Island has the largest amount of forest lands. Despite a gradual decline in forestry employment in Washington State and throughout the Pacific Northwest, forestry activities still account for a significant portion of land and economic activity in Western Washington. However, the forestry industry is unique in San Juan County due to the limited size of the local market and the logistical challenges of transporting logs and other wood products to mills or wholesalers in mainland Washington.

The tree harvest in San Juan County is episodic, and often linked to salvage operations after large storms. In 2011, the volume of harvested trees in San Juan County dropped to 308,000 board feet, but quickly increased to 1.6 million board feet in 2014. The wood in San Juan County is slow-growing and very dense, making it attractive for

certain applications, particularly in high-end construction. Stakeholders identified a need to understand and account for the added costs (e.g. off-island transportation) that apply to export-oriented extractive and value-added resource-related operations in San Juan County. In addition, stakeholders indicated that adopted policy should recognize the positive externalities not directly associated with forestry lands (such as revenues and employment related to tourism) that partially rely on the rural and pastoral character of the islands. Perhaps most importantly, forests provide essential ecosystem services and stakeholders widely believe that environmental stewardship should be encouraged by County policy, even if the economic indicators show limited or niche market opportunity for forest products.

INTRODUCTION

BACKGROUND AND PURPOSE

As in many Washington counties, timber has historically been a major contributor to the San Juan County economy. However, the forestry industry is unique in San Juan County due to the limited size of the local market and the logistical challenges of transporting logs and other wood products to mills or wholesalers in mainland Washington. Furthermore, climatological factors and soil conditions cause trees to grow more slowly on the islands when compared to forests throughout the state, resulting in less frequent and productive harvests. Some logging and forestry operations remain active, however, and forestry is critical to managing healthy forests and mitigating fire risk.

San Juan County is currently updating its Comprehensive Plan, and as part of that effort, the County will review its current resource lands policy. This report evaluates the economic viability of forestry, summarizes outreach to key industry stakeholders, and provides goal and policy recommendations for the Comprehensive Plan update.

METHODS

This report presents qualitative and quantitative analysis based on stakeholder perspectives and economic and land use data. Quantitative analyses involved secondary research and data gathering from Washington Department of Natural Resources, Washington Employment Security Department, U.S. Bureau of Labor Statistics, and others. Qualitative analyses are based on a series of interviews, as well as in-person studios and workshops conducted on San Juan, Orcas and Lopez islands. Findings and recommendations for policy are based on a synthesis of the data presented in the report.

ORGANIZATION OF THE REPORT

This report is organized into the following sections:

- Forest Land Policies in San Juan County – this section provides contextual information on policy frameworks that govern forest lands in San Juan County and Washington state, as well as recent case law pertaining to the designation and de-designation of forest lands.
- Economic Measures of Forestry in San Juan County – this section presents qualitative and quantitative findings related to jobs, wages, land and business characteristics, and industry challenges and opportunities for forestry operations.
- Economic Viability of Forestry in San Juan County – this section applies a set of criteria to evaluate the economic viability of forestry operations and designated forest lands.
- Implications for Forest Resource Land Policy – this section details the land use requirements to meet anticipated growth in forestry, as well as recommendations for Comprehensive Plan goals and policies, based on the data presented in the report.

FOREST LAND POLICIES IN SAN JUAN COUNTY

Forest lands in San Juan County are used for timber operations, as well as recreational and habitat uses, and provide many ecosystem services. These lands are governed by the San Juan County Comprehensive Plan, the San Juan County Code, the Revised Code of Washington (RCW) and other state and local programs, such as Open Space Taxation. This section documents the rules and regulations that govern the management of forest resource lands in San Juan County, as well as recent case law applicable to the Comprehensive Plan update process for resource lands.

APPLICABLE REGULATIONS, RULES AND OTHER CONSIDERATIONS

Under Washington State’s Growth Management Act, counties must establish requirements for classifying resource lands. Counties were required to designate forest lands that “are not already characterized by urban growth and that have long-term significance for the commercial production of timber” (RCW 36.70A.170).

San Juan County’s current Comprehensive Plan goals and policies are consistent with the state standard of preserving forest lands of long term commercial significance while also maintaining water quality and quantity and fish and wildlife habitat. To be designated as Forest Resource Lands under the current plan, forest lands in San Juan County must:

- Be classified within Forest Lands Grades 1-5 according to the Department of Natural Resources;
- Consist of at least 20 acres, or meet Washington State requirements for a timber open space designation;
- Be in a tax-deferred status (Designated Forest Land or Open Space-Timber), or under forest management as state trust lands; and,
- Be managed for long term production of forest products with few nonrelated uses present.

Permitted uses on Forest Resource Lands are codified in zoning and limited to those uses that are consistent with County goals for forest lands. In addition, cottage enterprises and industries related to forest resources are permitted.

RELEVANT GROWTH MANAGEMENT CASE LAW

The following cases were heard and decided by the Growth Management Hearings Board and serve to further interpret the mandates of GMA. This evolving interpretation is important context for any revisions to goals, policies or the Comprehensive Plan land use map that includes designation or de-designation of forest resource lands.

- **16-2-0001 - Friends of the San Juan v. San Juan County**

San Juan County de-designated 30 acres of forest land to a rural category. The Board found that the County did not complete the required analysis mandated by GMA to de-designate such lands, and the County repealed the ordinance.

- **Friends of the San Juans v. San Juan County, Case 10-2-0012:**

Friends of the San Juans challenged the siting of Essential Public Facilities (EPFs) by San Juan County on the grounds that the County's code pertaining to siting such facilities does not meet requirements related to natural resources lands and Goal 8 of GMA. The Board determined the County substantially interfered with Goal 8 because natural resource lands would be developed for an EPF and would thereby convert that land to a non-resource use, precluding the use of these lands for agriculture and forestry.

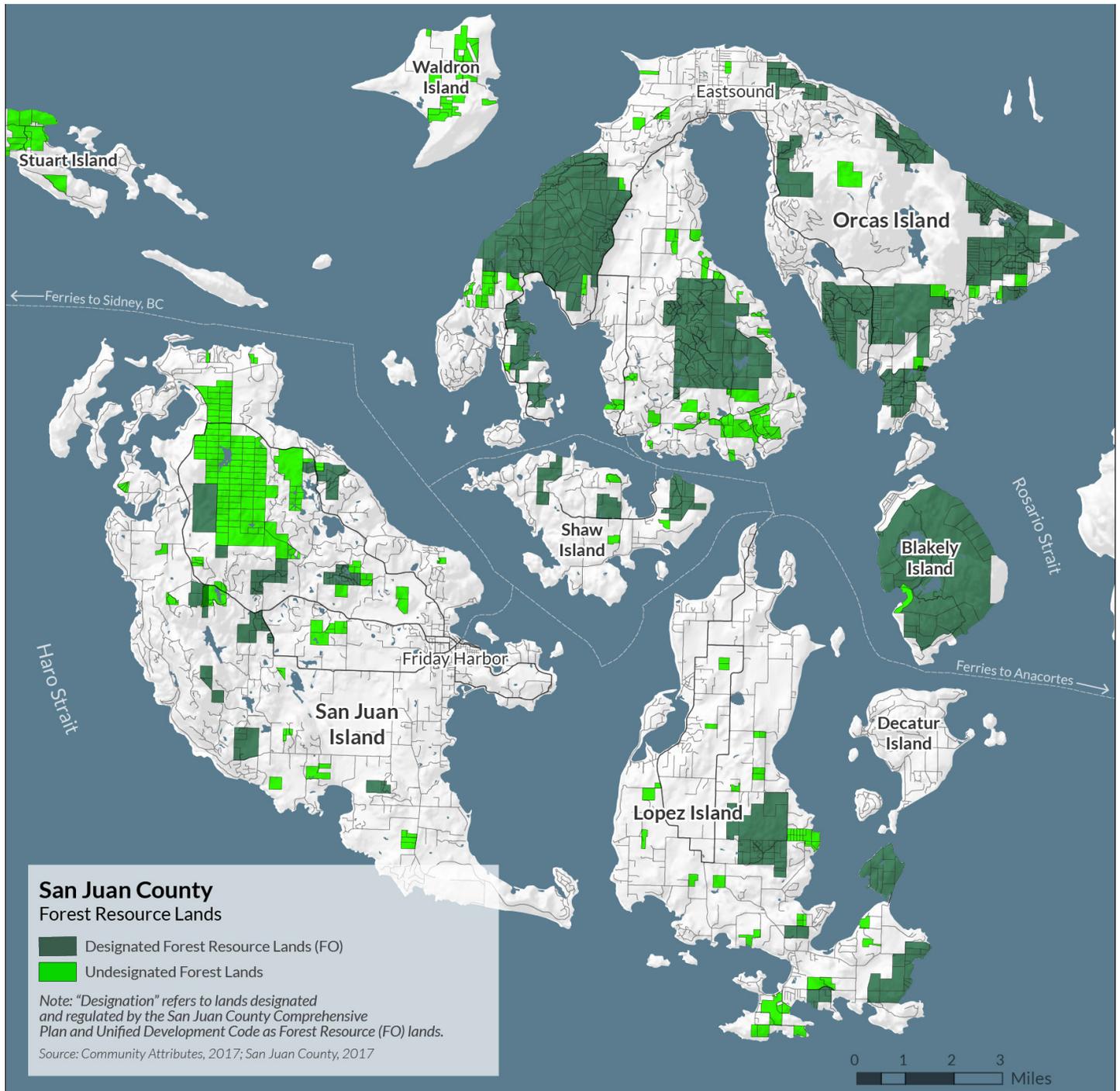
- **Advocates for Responsible Development and John Diehl v. Mason County, Case No. 07-2-0006:**

Petitioners challenged three Mason County ordinances, including an ordinance that changed the designation of a parcel of property from Long Term Commercial Forest to In Holding. The GMHB found the change in the Future Land Use Map constituted a comprehensive plan amendment, thus subjecting it to the Board's jurisdiction and resulting in an internal plan inconsistency. The land owners appealed, alleging the County's decision constituted a site-specific rezone and thus the Board lacked jurisdiction; the Court of Appeals affirmed the GMHB determination.

EXISTING FOREST RESOURCES

There are approximately 18,900 acres of designated forest resource land in San Juan County. The Comprehensive Plan designates these as FO. There are other lands within the County that are currently used for forestry and logging activities, and are enrolled in the current use taxation program. These lands are the subject of this report, and are depicted in **Exhibit F1**.

Exhibit F1. Designated FO Resource and Forest Lands, San Juan County, 2017



ECONOMIC MEASURES OF FORESTRY IN SAN JUAN COUNTY

Despite a gradual decline in forestry employment in Washington State and throughout the Pacific Northwest, forestry activities still account for a significant portion of land and economic activity in Western Washington. In San Juan County, specifically, many firms and employees engaged in forestry activities are also engaged in other construction, excavation, site preparation and or resource-related activities, making it difficult to determine the exact size of this industry within the County. The Washington State Department of Natural Resources reports:

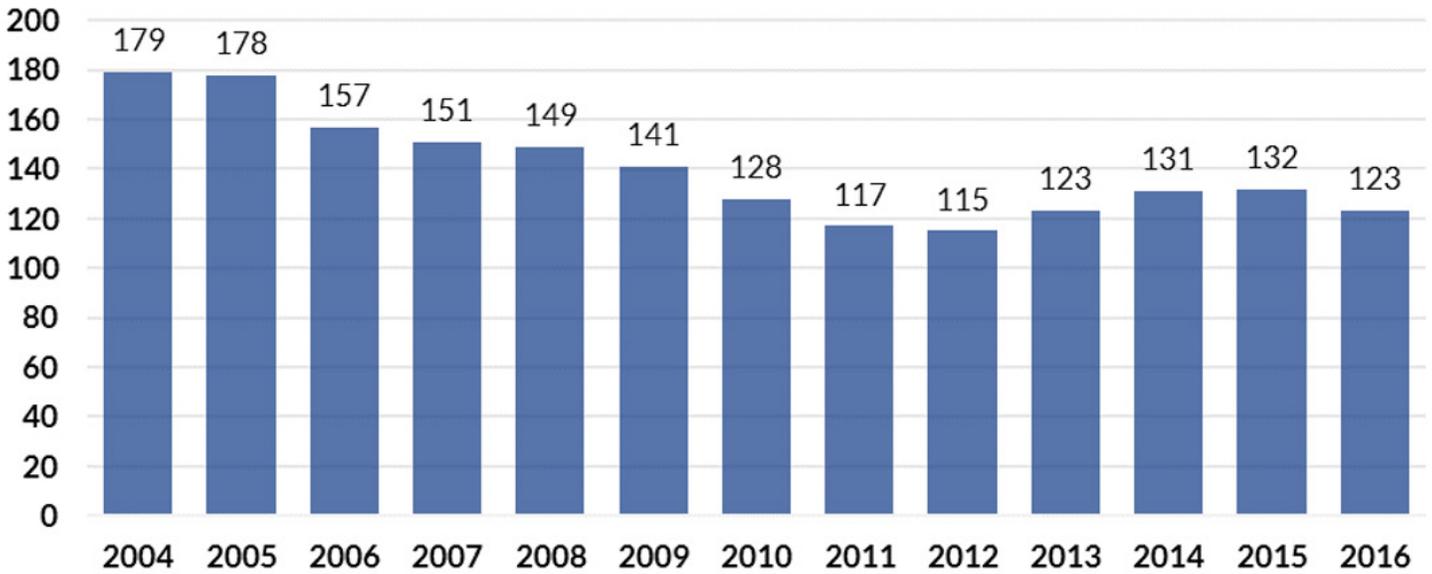
- Forest lands in western Washington are more productive than those in Eastern Washington.
- There are five timbersheds, or timber supply areas, in Western Washington.
- There are 9.5 million acres of unreserved timberland in Western Washington, 310,000 acres of which are restricted to use by Native Americans; 1.6 million acres for state (and local) government uses; 1.7 million acres for non-industrial uses; 2.3 million acres for federal uses (USFS and others); and the remaining 3.7 million acres are restricted for forest industry.
- About 75 percent of forest lands are younger than 100 years old in Western Washington.
- The total forest area on private lands in Western Washington has decreased about one percent per year, primarily due to conversion for agriculture or real estate development.
- Compared with Eastern Washington, forests grow considerably faster in Western Washington.
- Nearly all forests in San Juan County are privately owned in small holdings.

Due to limitations in data availability, this section of the report explores trends in forestry at the regional level, and applies these trends to San Juan County. Current economic conditions are therefore presented below for the broader region of Western Washington, inclusive of Clallam, Jefferson, Kitsap, Island, San Juan, Skagit, Snohomish & Whatcom counties.

LEADING EMPLOYERS AND ACTIVITIES

The number of Forestry and Logging industry establishments in Western Washington declined from 179 establishments in 2004 to 115 in 2012. The number of establishments has generally stabilized since 2010, and there were 123 establishments in 2016 (**Exhibit F2**). The longer-term trend has been a decline in establishments, especially during the 1990s, when the adoption of the Northwest Forest Plan and the listing of the Spotted Owl as an endangered species protected large swaths of forest habitat from commercial forestry and logging.

Exhibit F2. Number of Establishments, Forestry and Logging, Western Washington, 2004 -2016



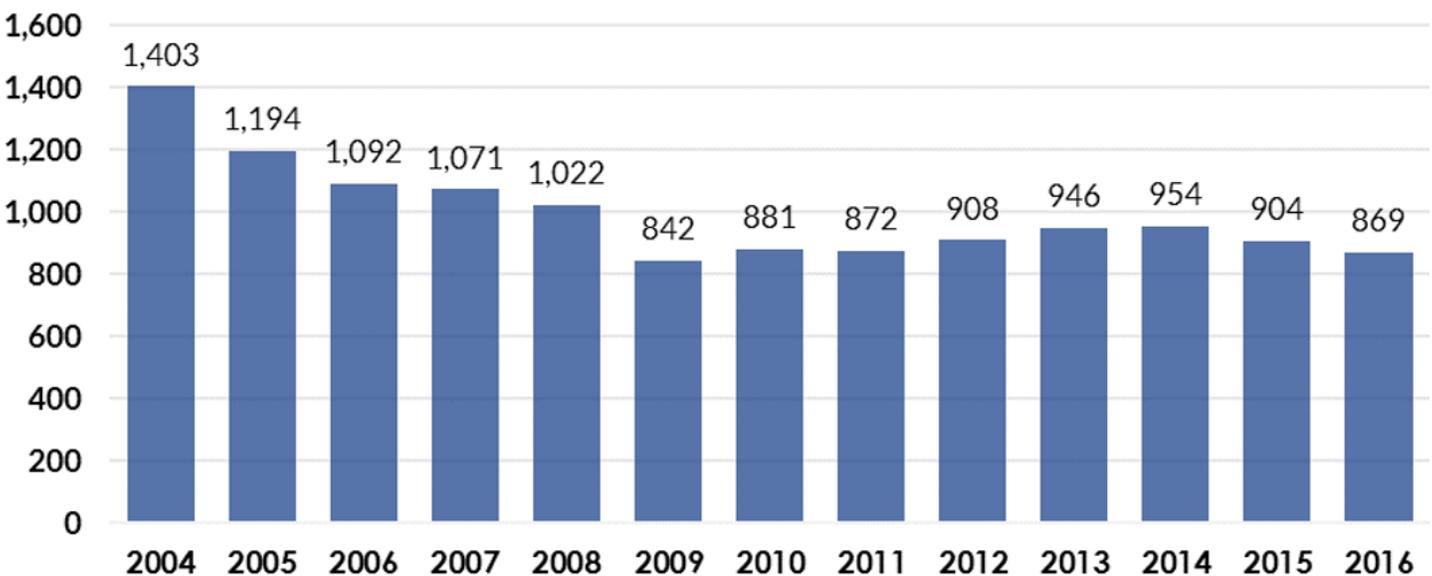
Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

JOBS

The average annual employment of Forestry and Logging in Western Washington declined from 1,403 jobs in 2004 to a low of 842 jobs in 2009, and more recently 869 jobs in 2016 (Exhibit F3). The represents a 38% decline in employment over a 12-year span. The trend mirrors the decline in establishments (Exhibit F2) with the significant portion of the losses occurring between 2004 and 2009, and a relative stabilization between 2010 and 2016.

Total wages paid in the forestry and logging industry has also been in decline (Exhibit F4), despite the average annual wage per worker increasing by approximately \$2,300 since 2004 (Exhibit F5). Total wages peaked at \$63.2 million in 2004, indicating that the decrease in total wages paid is largely due to decreasing employment, not decreasing compensation for employees.

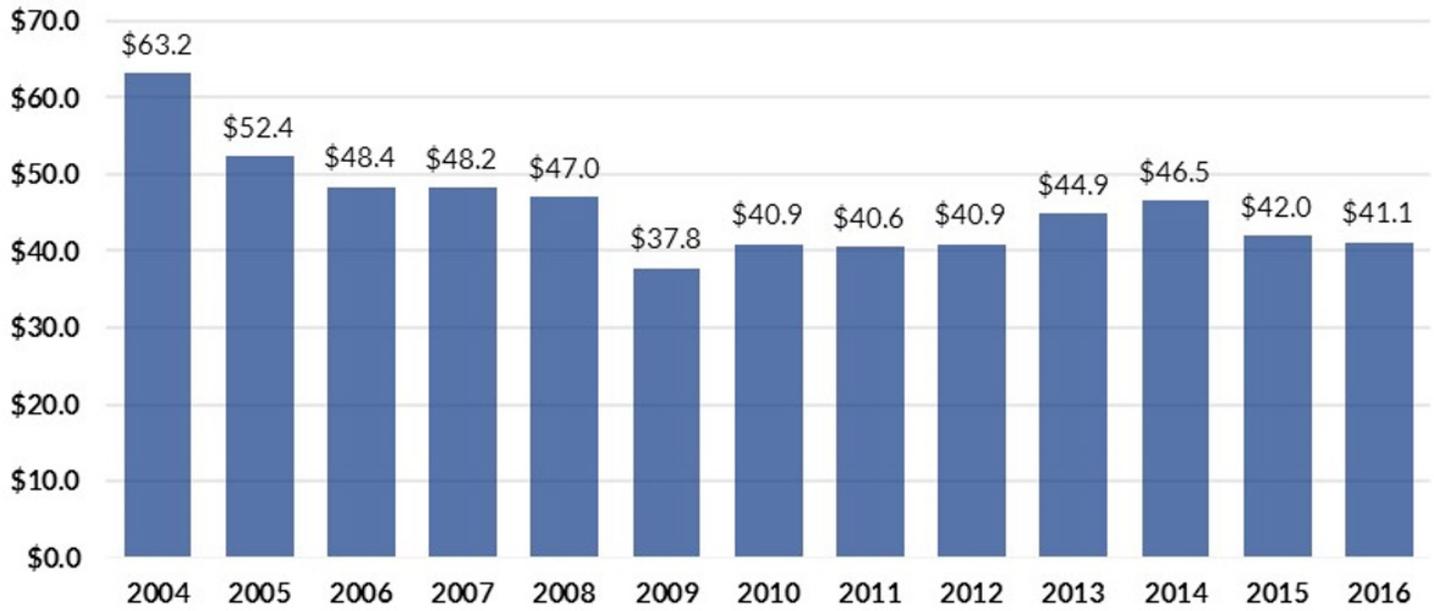
Exhibit F3. Average Annual Employment, Forestry and logging, Western Washington, 2004 -2016



Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc.,

Exhibit F4. Total Wages Paid, Forestry and Logging, Western Washington, 2004-2016

\$ 2016 Millions



Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

Exhibit F5. Average Annual Wage, Forestry and Logging, Western Washington, 2004-2016

\$ 2016 Thousands



Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

FOREST LAND CHARACTERISTICS

San Juan County comprises about 111,300 acres, of which about 14% percent is current characterized by a forestry-related land use according to the San Juan County Assessor. These land uses include codes 8800 (Designated Forest Land), 8820 (Designated Forest Land with a Conservation Easement), 9500 (Current Use Timber Land) and 9520 (Current Use Timber Land with a Conservation Easement). **Exhibit F6** summarizes the distribution of forestry acreage by island. These are lands in current use for forestry; some of these lands are designated as forest resource lands by the Comprehensive Plan, and some designated forest resource lands are not currently assigned a forestry land use code. For comparison, there are about 18,900 acres of designated forest resource land in the current San Juan County Comprehensive Plan. Only seven islands within the County have forest lands, according to the land use code.

Exhibit F6. Forestry Acreage by Island, San Juan County, 2017

Island	Acres
Orcas	5,642.9
San Juan	4,135.6
Blakely	3,384.5
Lopez	1,216.1
Stuart	566.9
Waldron	432.2
Shaw	282.4
Total	15,660.6

Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

The total assessed value of forestry land (as defined by land use codes) in San Juan County is \$123 million, 43% of which is attributable to forest lands on Orcas Island, and 29% percent of which is attributable to forest lands on Lopez Island. The average per-acre land value of forest lands in San Juan County is \$12,250 per acre. Though Lopez Island has only the fourth-most forest land in the County by acreage, forest lands on Lopez Island are more valuable per acre (\$30,503) than forest lands on any other island in the County. Average land values per acre for forest lands on each of the seven islands with forest lands are given in **Exhibit F7**.

Exhibit F7. Forestry Land Value, San Juan County, 2017

Island	Land Value	Average Value / Acre
San Juan	\$15,998,800	\$3,869
Orcas	\$52,870,890	\$9,369
Lopez	\$35,755,350	\$29,402
Blakely	\$1,608,310	\$475
Stuart	\$11,298,780	\$19,931
Waldron	\$2,063,350	\$4,774
Shaw	\$3,450,770	\$12,218
Total	\$123,046,250	\$12,250

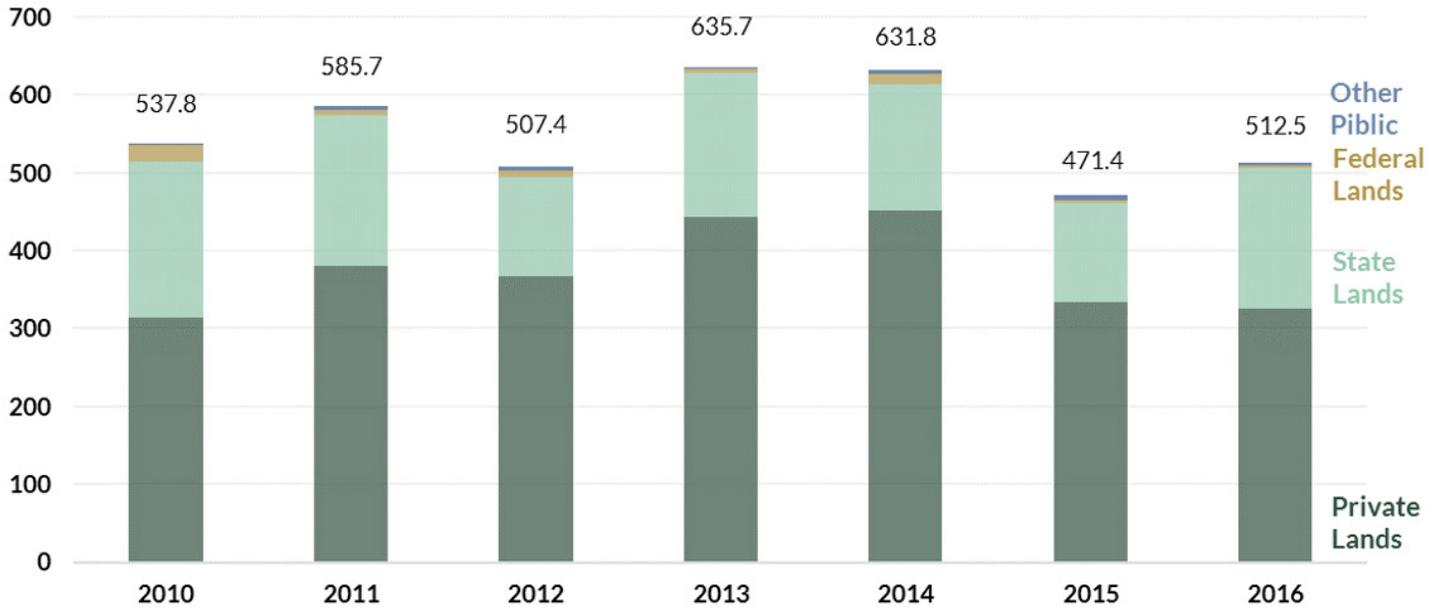
Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

There were 512.5 million board feet harvested in Western Washington in 2016; volumes averaged 554.6 million board feet per year between 2010 to 2016 (**Exhibit F8**). On average, about 67% of the total harvest came from private lands; about 30% of the total volume of harvested trees was harvested on state lands; the remaining harvest came from an array of federal and other public lands.

In 2011, the volume of harvested trees in San Juan County dropped to 308,000 board feet, but quickly increased to 1.6 million board feet in 2014. Generally, the vast majority of the tree harvest in San Juan County occurs on private lands (**Exhibit F9**).

Exhibit F8. Volume of Harvested Trees by Land Ownership, Western Washington, 2010-2016

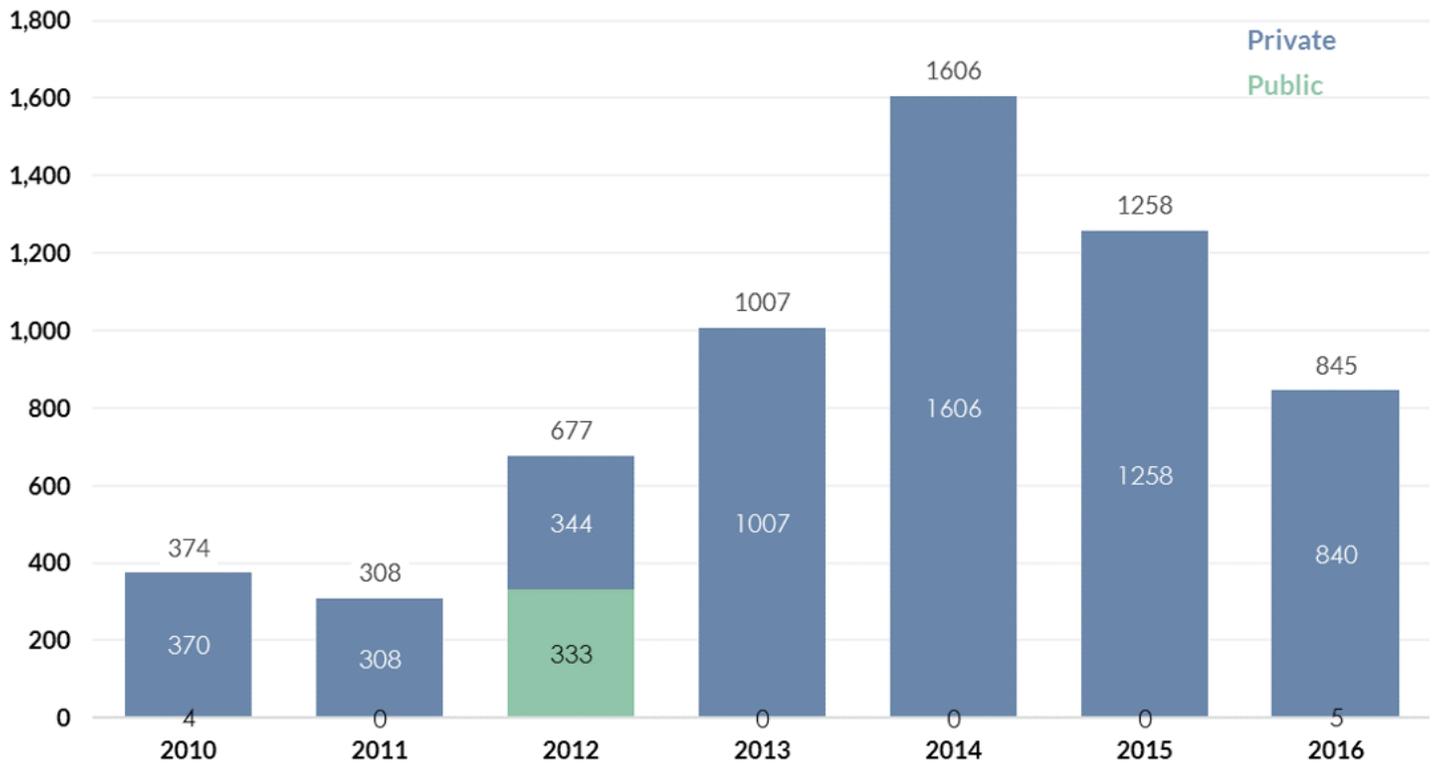
Million board feet



Source: Washington State of Natural Resources, 2017; Community Attributes Inc., 2017

Exhibit F9. Volume of Harvested Trees by Land Ownership, San Juan County, 2010-2016

Thousand board feet



Source: Washington State of Natural Resources, 2017; Community Attributes Inc., 2017

QUALITATIVE ASSESSMENTS OF FORESTRY IN SAN JUAN COUNTY

Stakeholder feedback supplements the data presented in the prior section. Engagement activities included interviews with experts in forestry and conservation, as well as landowners. The interviews were supplemented by responses to an online survey, comments on an online map-based comment platform, and responses at a series of workshops and pop-up studios on San Juan, Orcas and Lopez islands. The themes that emerged from the comments are given below, and influence the recommendations provided for goal and policy development.

- The timber harvest in San Juan County tends to be episodic, linked to storms, wind, etc. Harvesting for salvage is important in certain cases to prevent fuel hazard situations and insect/disease problems, and can generate significant quantities of timber.
- Forestry is critical to healthy forests, which offer multiple benefits outside of timber products: wildlife habitat, clean water and aquifer recharge, views, carbon sequestration, and other ecosystem services that should be acknowledged by adopted policy. To the extent possible, incentives should be put in place on resource lands to encourage environmental stewardship.
- Competitive disadvantages for forestry in San Juan County include small parcels, transportation costs, and limited growth potential of the land, which may be half as productive as low elevation mainland forests with greater rainfall and deeper soil depth.
- The current use taxation program is critical, but often misunderstood by land owners, and has suffered from inconsistent application and enforcement over the year. The program requires that landowners adhere to harvest targets given in a forest management plan, but the inability of some landowners to draft and periodically revise a forest management plan that is appropriate for the intricacies and unique qualities of their land make compliance over time a difficult proposition. The DNR, along with some non-profit organizations, do provide some

assistance with writing forest management plans, and the Northwest Natural Resource Group provides some assistance through cost-sharing and workshops. Participation in the current use tax program is essential because kicking people out of the program often leads to the parcelization and sale of the land for non-forestry uses.

- Orcas Island has more timber than any of the islands, but even on Orcas Island there are only a few logging contractors (essentially owner-operators), that for the last several years have been full time employed through logging. Many individuals engaged in forestry are employed in multiple industries (e.g. as site development contractors).
- The wood in San Juan County is slow-growing and very dense, making it attractive for certain applications (e.g. trim wood, post-and-beam and other structural uses). Therefore, locally consumed value-added products likely offer some untapped market potential, and local builders are much more aware of locally produced products now, but products that are less expensive and readily available off the shelf make it a difficult market. Other opportunities (e.g. biomass) may offer greater potential unless subsidies are available.
- There is a need to understand and account for the added costs (e.g. off-island transportation) that apply to export-oriented extractive and value-added resource-related operations in San Juan County, particularly forestry, which used to rely on waterborne transportation to take raw logs to the mainland for processing. No such “log dumps” exist in the County any longer, making direct-to-mill marine transport exceedingly challenging and exacerbating transportation difficulties.
- Adopted policy should recognize the positive externalities not directly associated with forestry lands (such as revenues and employment related to tourism) that partially rely on the rural character of the islands.

ECONOMIC VIABILITY OF FORESTRY IN SAN JUAN COUNTY

VIABILITY CRITERIA

Economic viability for forestry in San Juan County takes into consideration how the forestry industry in San Juan County compares against Washington State and other industries in San Juan County. The metrics below assess San Juan County’s forestry performance across the following categories:

- Number of establishments
- Average annual employment
- Average annual wages
- Volume of harvested trees per acre
- Projected future growth

- Logging in Northwest Washington (serving the residents and businesses of Island, San Juan, Skagit and Whatcom Counties) will experience an average annual growth rate of -1.1% through 2020 and then remain relatively flat, with a annual growth rate of -0.06% through 2025.
- Support activities for forestry employment is projected to decline by 1.8% across 2015 to 2020, followed by flat growth through 2025.
- Sawmills and wood preservation employment are projected to grow 0.5% per year through 2020 and 1.2% between 2020 and 2025.
- Other wood product manufacturing employment is projected to grow 1.9% per year through 2020 and then stabilize through 2025.

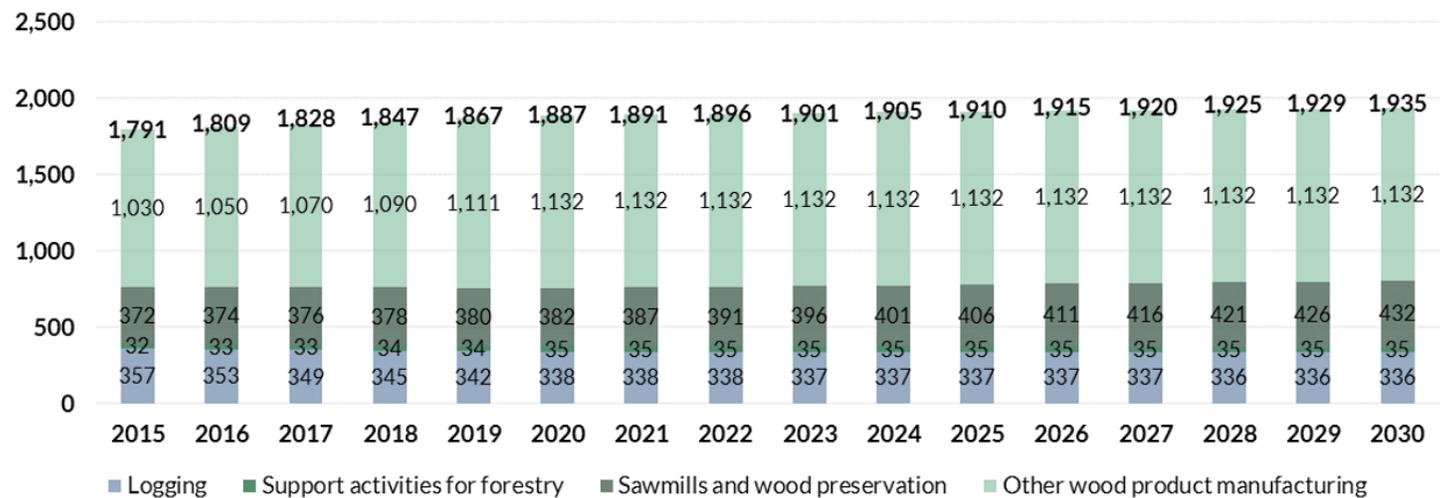
FUTURE GROWTH IN FORESTRY

The forecast of forestry employment includes employment from logging (NAICS code 1133), support activities for forestry (NAICS code 1153), sawmills and wood preservation (NAICS code 3211) and other wood product manufacturing (NAICS code 3219).

The following projections are based on employment forecasts from the Washington State Employment Security Department in 2017.

The overall growth of forestry—representing the subsectors above—in Northwest Washington is expected to average annual growth of 1.0% per year through 2020 followed by 0.2% through 2025. Projected employment levels in Northwest Washington will exceed 1900 jobs in 2030 (assuming the same growth 2020-2025). Most of the growth is projected in “other wood product manufacturing, not in logging or forestry (Exhibit F10).

Exhibit F10. Forecast of Forestry Employment, Northwest Washington, 2015-2030



Source: Washington State Employment Security Department, 2017; Community Attributes Inc., 2017

APPLICATION OF VIABILITY CRITERIA

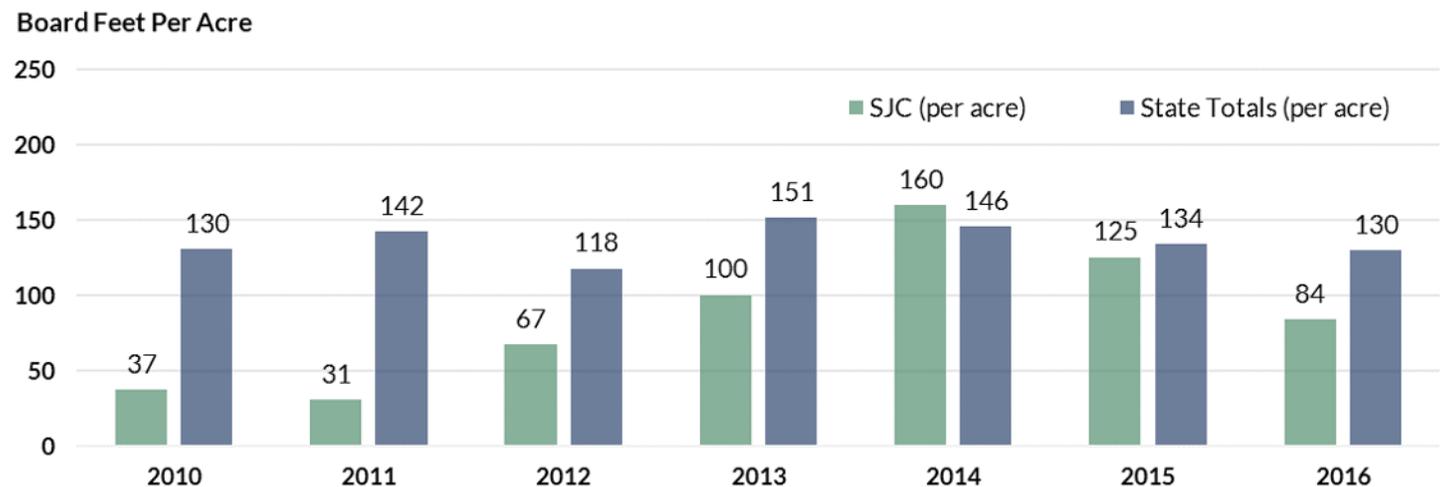
- Establishment growth/decline consistent with Washington state. The compound annual growth rate for the number of forestry establishments in San Juan County between 2004 and 2016 was -3.1%, which was similar to the rate for Washington State. However, growth in establishments across all industries in San Juan County was 0.7% per year over this period.
- Employment growth negative but consistent with Washington state. The compound annual growth rate for employment in forestry in San Juan County was -3.9%, while the rate for forestry statewide was -3.3% per year; the growth rate across all industries in San Juan County of 0.6% annually.
- Income. The average annual wage (adjusted for inflation) has increased from 2004 to 2016, though less than the statewide average of 1.7%.
- Less productive acreage compared with the state overall. Forestry in San Juan County has generally been less productive than forestry statewide. In 2010, the volume of harvested trees in San Juan County was 37 board feet per acre, which was only 28.5% of the volume of harvested trees per acre statewide. This value increased and even surpassed the state average in 2014 but then quickly regressed. In 2016, the number dropped back to 84 board feet per acre, or 65% of the statewide average for harvested tree volume per acre.

Exhibit F11. Compound Annual Growth Rates Comparison, 2004 - 2016

	Forestry and logging, Western Washington	Forestry and logging, Washington State	All Industries, San Juan County
CAGR of Number of Establishments	-3.1%	-3.2%	0.7%
CAGR of Average Annual employment	-3.9%	-3.3%	0.6%
CAGR of Average Annual Wage (\$2016)	0.4%	1.7%	0.5%

Source: U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017.

Exhibit F12. Volume of Harvested Trees Per Acre Comparison, Washington State, San Juan County, 2010 - 2016



Source: Washington State Department of Natural Resources, 2017; Community Attributes Inc., 2017

IMPLICATIONS FOR FOREST RESOURCE LAND POLICY

MINIMUM LAND USE REQUIREMENTS FOR FORESTRY

There are few commercial forestry operations in San Juan County, and the limited market for San Juan County timber suggests that there is limited demand for forest resource land on the islands. Periodically intensive harvests, especially due to salvage operations after storms, occur on non-designated and designated forest lands alike. However, there appears to be support from citizens for the preservation of forest lands, and there are landowners currently enrolled in the current use taxation program for forestry. Those factors influence land demand for forestry.

STANDARDS FOR FOREST RESOURCE LAND DESIGNATION

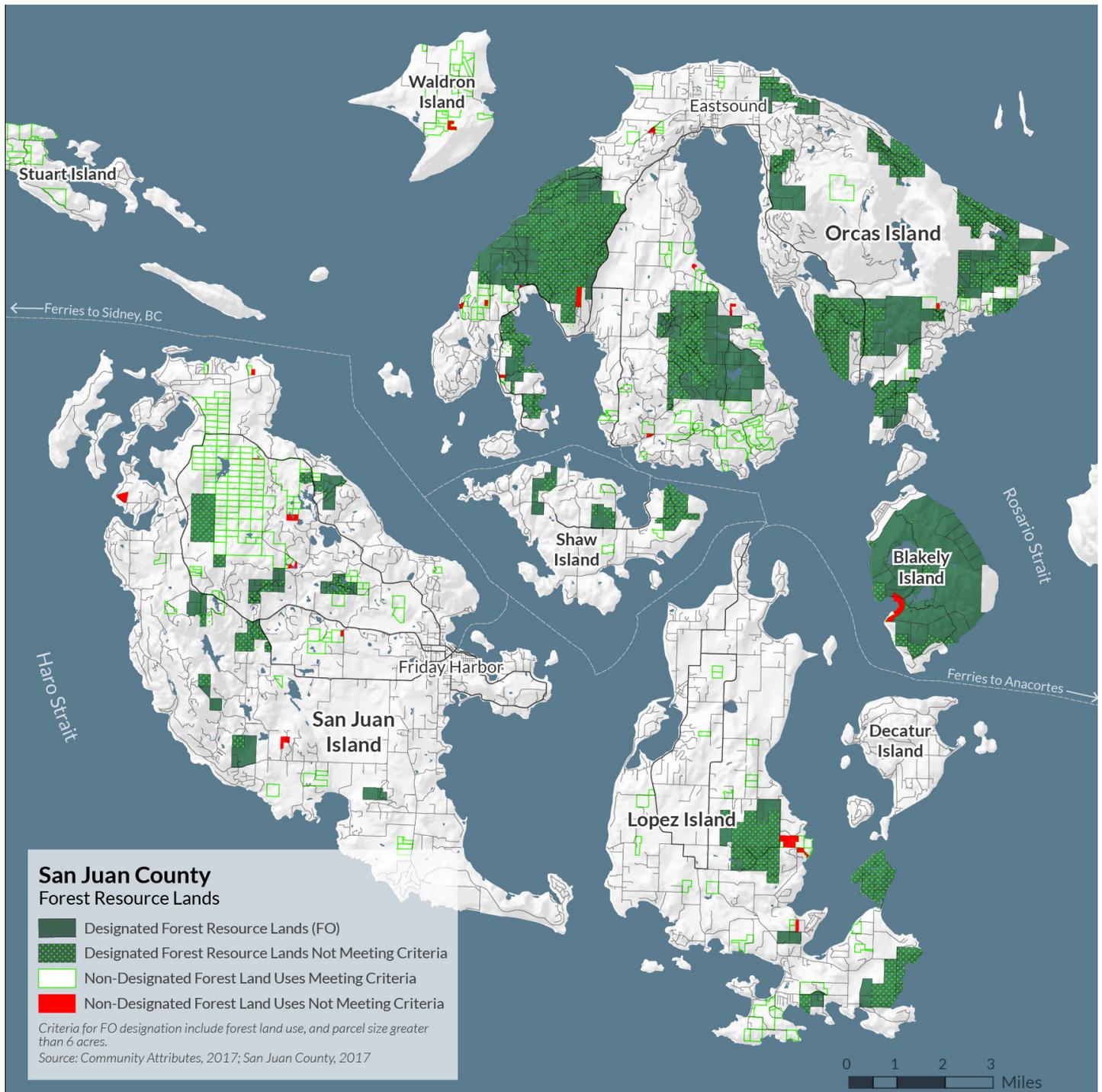
The following maps (**Exhibits F14 and F15**) illustrate lands that either are currently designated as forest resource lands, and that potentially do not meet the criteria for designation, or lands that are not currently designated as forest resource lands, but potentially could meet the criteria for designation. These maps are based on the designation criteria current adopted in the San Juan County Comprehensive Plan. The table in **Exhibit F13** provides additional detail for these maps.

Exhibit F13. Forest Lands and Designation Status, San Juan County, 2017

	Total Acres
Designated Forest Resource Lands	18,877.3
Designated Forest Resource Lands Potentially Not Meeting Criteria	10,304.0
No Forest Land Use Recorded by SJC Assessor	10,304.0
Parcel Size Less than 6 Acres	733.0
Non-Designated Forest Land Uses Potentially Meeting Criteria	6,726.4
Non-Designated Forest Land Uses Potentially Not Meeting Criteria	214.0

Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

Exhibit F14. Forest Lands and Designation Status Map, San Juan County, 2017



Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

Note: "Criteria" for SJC Forest Resource Land designation are stipulated in the adopted San Juan County Comprehensive Plan; GIS data was unavailable for DNR Forest Land Grades, and these data do not include lands not currently characterized by the appropriate forest land grade. Non-designated forest lands are those deemed to be in current forestry-related use by the San Juan County Assessor, but are not designated as resource lands in the adopted San Juan County Comprehensive Plan. Total designated resource acres potentially not meeting criteria does not equal the sum acres in the breakout by criteria due to overlap (all Designated FO parcels under six acres were also coded non-forestry-related land use by the SJC Assessor).

Exhibit F15. Forest Lands and Designation Status Detail, San Juan County, 2017



Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

GOAL AND POLICY RECOMMENDATIONS

The existing goal and policy language from the 2010 Comprehensive Plan update is taken from the Land Use Element (B2) and reproduced below, with comments, potential revisions and possible additions. The comments, revisions and additions are based on an understanding of the economic vitality of the resource industry sectors in question, as well as trends in economic viability and input from key stakeholders.

Existing Comprehensive Plan Language	Recommendations
<p>b. Forest Resource Lands</p> <p>Goal:</p> <p>To protect and conserve forest lands of long-term commercial significance for sustainable forest productivity and provide for uses which are compatible with forestry activities while maintaining water quality, water quantity, and fish and wildlife habitat.</p>	<p>General comments:</p> <p>There were similar stakeholder comments on forest land as on agricultural land, and many stakeholders pointed to a need to better understand the off-site economic impacts of the preservation of forest land, even if not used for forestry. In other words, retailers, tour operators, lodging and hospitality establishments are all dependent on the preservation of forest lands for their businesses to thrive, since that quality of those forest lands draw visitors (and customers) to the islands. However, the economic impacts of those non-resource-related or non-extractive businesses are not attributed, in whole or in part, to the forest lands. In this way, a focus on long-term commercial significance could allow the inherent logistical and economic difficulties in forestry and logging in San Juan County lead to an erosion of protections for these lands.</p> <p>Encouraging and valuing the ecological stewardship of forest lands, as well as the ecological services that forests provide, was a central theme of stakeholder conversations.</p>

Existing Comprehensive Plan Language	Recommendations
<p>Policies:</p> <p>(1) Lands which are characterized by the following criteria may be designated Forest Resource Lands:</p> <ul style="list-style-type: none"> i. are in Forest Land Grades 1-5 on the Department of Natural Resources Private Forest Land Grades map; ii. parcels are twenty acres or larger, or of a size meeting the Washington State requirements for timber open space designation; iii. are in a tax deferred status of Designated Forest Land or Open Space-Timber, or are state trust lands under forest management; and iv. are being managed for the long-term production of forest products with few non-forest related uses present. 	<p>No changes suggested.</p>
<p>(2) Limit conversion of Forest Resource Lands to non-forest uses through implementation of a purchase or transfer of development rights program, special tax assessment programs, conservation easements, and/or the formulation of site design standards for residential land divisions, including standards for planned unit developments.</p> <p>(3) Allow cottage enterprises, and forest resource-based industries such as lumber processing and retailing facilities for forest products.</p>	<p>No changes suggested.</p>

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MINING RESOURCE LANDS

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MINING IN SAN JUAN COUNTY

MINING EXECUTIVE SUMMARY

Mining lands in San Juan County account for about 215 acres of land, and the County is home to seven active surface mines, which are largely used to extract aggregate (e.g. sand and gravel). These products are mostly used on the islands, and are generally not for export to mainland Washington. Large-scale, export-oriented mining activities, such as existing for lime in Roche Harbor and other parts of the County, are no longer active.

The numbers of mining companies (establishments) and jobs have been in decline on the islands in recent decades. Nevertheless, a regional forecast indicates that mining activities in Northwest Washington could grow slightly in through 2030. Given that most of the local demand for aggregate is driven by population growth, San Juan County could also see modest gains in mining employment if population growth, and particularly new home construction, continues.

The long-term economic future for mining in San Juan County is unlikely to be characterized by robust growth. Adopted goals and policies for mining in the Comprehensive Plan are largely adequate for the current conditions of the industry. As existing surface mines reach the end of their useful lives and extraction activities slow down or cease altogether, the County will increasingly need policy to address the adaptive reuse of these mines.

INTRODUCTION

BACKGROUND AND PURPOSE

San Juan County seeks to gain a better understanding of how resource lands in the County are performing, with a focus on economic impacts and indicators. The analysis will be leveraged to inform the County's Comprehensive Plan update and help guide policy level decisions related to designated resource lands and, in particular, designated mining lands.

In San Juan County there are two records of mining claims on public land managed by the Bureau of Land Management and 58 records of mineral deposits listed by the United States Geological Survey (USGS). There are also seven active surface mine permits on private lands, according to the Washington Department of Natural Resources. This report explores the state of mining activities in San Juan County by examining related regulations, economic measures and the future viability of mining.

METHODS

The approach to this work focuses on evaluating mining in San Juan County by leveraging a combination of stakeholder outreach, land use data and industry and employment data to create a comprehensive overview of the state of mining and its future viability. The method includes the following key steps:

- Evaluate existing policies and rules
- Generate a baseline of existing conditions related to mining in San Juan County
- Estimate future needs and demand for mining/resource lands
- Make policy recommendations leveraging said analysis

Data sources utilized for the report include the following.

- San Juan County Assessor
- Washington State Employment Security Department

- Bureau of Labor Statistics
- Washington Growth Management Hears Board
- Hoovers Business License Data

ORGANIZATION OF THE REPORT

The report is organized into the following sections.

- Mining Policies in San Juan County – this section includes a discussion of relevant regulations, rules and caselaw influencing mining activities and land use Washington State.
- Economic Measures of Mining in San Juan County – this section includes a review of economic indicators related to mining in San Juan County.
- Economic Viability of Mining in San Juan County – this section includes a quantitative and qualitative analysis of the viability of mining in San Juan County.
- Implications for Mining Resource Land Policy – this section includes a look at mining activity and growth and implications on land use policies.

MINING POLICIES IN SAN JUAN COUNTY

The following section provides an overview of the regulatory environment for mining in Washington State and San Juan County. The focus of the review is on the application of land use laws and regulations as well as policies found in the County’s Comprehensive Plan. Included is a review of recent Washington Growth Management Hearings Board cases and decisions.

APPLICABLE REGULATIONS, RULES AND OTHER CONSIDERATIONS

Under Washington State’s Growth Management Act, counties are required to establish requirements for classifying resource lands. Counties were required to designate mineral resource lands that “are not already characterized by urban growth and that have long-term significance for the extraction of minerals”. (RCW 36.70A.170)

San Juan County’s current comprehensive plan goals and policies are consistent with the state standard of designating mineral resource lands of long term

commercial significance. While San Juan County’s resource lands for agriculture and forestry are designated with resource land designations, its mineral resource lands are designated with overlay districts. Landowners may apply to designate a Mineral Resource Land Overlay District over their property if it:

- Has a known or potential extractable resource in commercial quantities, as verified by a professional geologic and economic report;
- Is in a current or future land use that will not exceed a residential density of one dwelling unit per ten acres;
- Is not within certain urban, residential, conservation, or shoreline designations; and
- Is not within a wetland or fish and wildlife conservation area.

The plan places strongest emphasis on conserving mineral resource lands that are most likely to be commercially productive in the long term with the most minimal environmental impact. Uses consistent with the commercial viability of mineral resource extraction are permitted on these lands, provided they meet performance standards to minimize negative impacts to neighboring areas.

RELEVANT GROWTH MANAGEMENT CASE LAW

The following Washington GMA Hearings Board cases were selected to illustrate the various issues and challenges occurring across Washington State related to designated mining or mineral resource lands. In recent years there have only been a limited number of cases heard by the GMA Hearings Board directly related to mining/mineral resource lands.

- **10-2-0020c - Weyerhaeuser Company, et al v. Thurston County**

Thurston County passed a resolution that changed the designation criteria and development regulations for its mineral resource lands. The GMHB found that the County failed to comply with applicable RCW as amendments to the Resolution and Ordinance were made outside of the public hearing process.

- **Concrete Nor’West and 4M2K, LLC v. Whatcom County, Case No. 12-2-0007**

The case centered on the requested designation of privately owned lands in Whatcom County. The landowner, a division of Miles Sand and Gravel

Company, wished to include the land in a County Mineral Resource Lands Overlay. The request and ordinance were denied by the County. The decision was upheld by the GMA Hearings Board.

- **Confederated Tribes and Bands of the Yakama Nation v. Yakima County, Case No. 10-1-0011**

The Yakama Nation challenged the Department of Ecology’s approval of Yakima County’s Shoreline Master Program (SMP). The GMHB upheld the SMP with respect to application of the “optimum implementation” standard required for shorelines of statewide significance. Designation of the

floodplain, conditional allowance of surface mining in the shoreline, and vegetative buffer widths were also upheld. The SMP was sent back to Yakima County for completion of the cumulative impacts analysis for surface mining.

EXISTING MINING RESOURCES

The County has seven active and permitted mining sites, comprising about 215 acres. **Exhibit M1** illustrates the locations of lands noted as mining uses (based on assessor data) and lands with active mining permits. Within the

Exhibit M1. Designated Mining Lands and Active Mining Permits, San Juan County, 2017



County, Orcas Island has the most active mining permits and acreage denoted as a mining land use.

Exhibit M2 illustrates the types of mining occurring in San Juan County. The table summarizes the surface mining permits currently active with the Washington Department of Natural Resources.

Exhibit M2. Active Surface Mining Permits, San Juan County, 2017

Mine Name	Permit Acreage	Permit Depth (ft.)	Commodity
Mountain Crest	1.93	85	Rock and Stone
Egg Lake Quarry	10.1	60	Rock and Stone
Lopez Sand & Gravel	15.0	100	Sand and Gravel
Sea Island Shale Pit	26.0	60	Rock and Stone
Lawson Quarry	40.0	170	Rock and Stone
Dolphin Bay Quarry	41.3	200	Rock and Stone
Boxeur One	53.0	60	Sand and Gravel

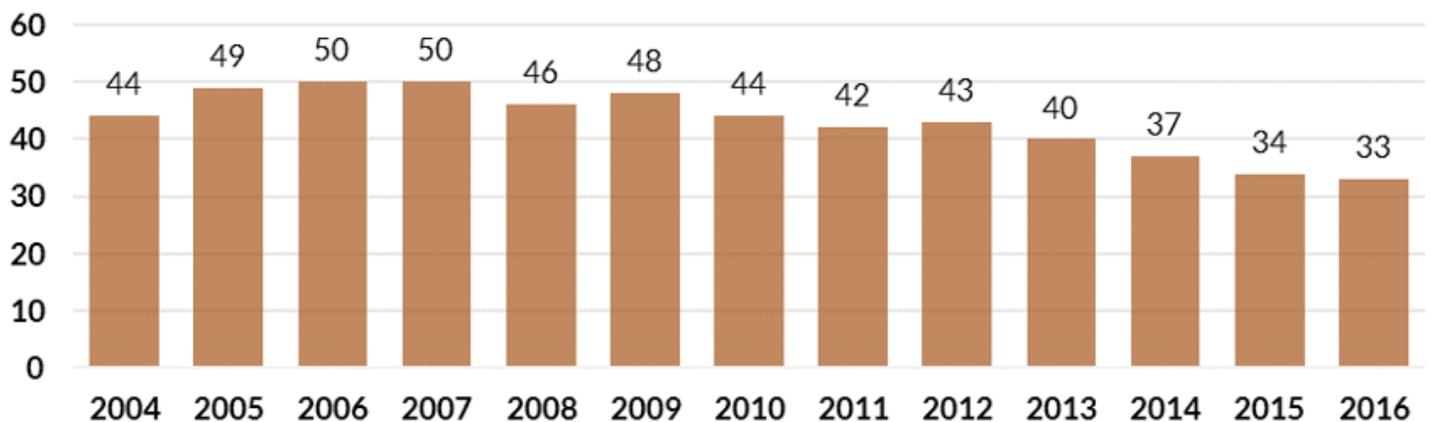
Source: Washington Department of Natural Resources, 2017

ECONOMIC MEASURES OF MINING IN SAN JUAN COUNTY

The following section provides an overview of selected economic measures related to the mining industry in Western Washington. The measures help illustrate the scale and trajectory of the industry in terms of employment, jobs and other related metrics. In addition, stakeholder interviews provide a qualitative assessment of the industry locally.

Exhibit M3. Number of Establishments, Mining (except oil and gas), Western Washington, 2004 -2016

Establishments



Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

LEADING EMPLOYERS AND ACTIVITIES

Current economic conditions are presented below for the broader region of Western Washington, inclusive of Clallam, Jefferson, Kitsap, Island, San Juan, Skagit, Snohomish & Whatcom counties.

The number of establishments in Mining (except oil and gas) in Western Washington is small, averaging 43 establishment each year between 2004 and 2016 (**Exhibit M3**).

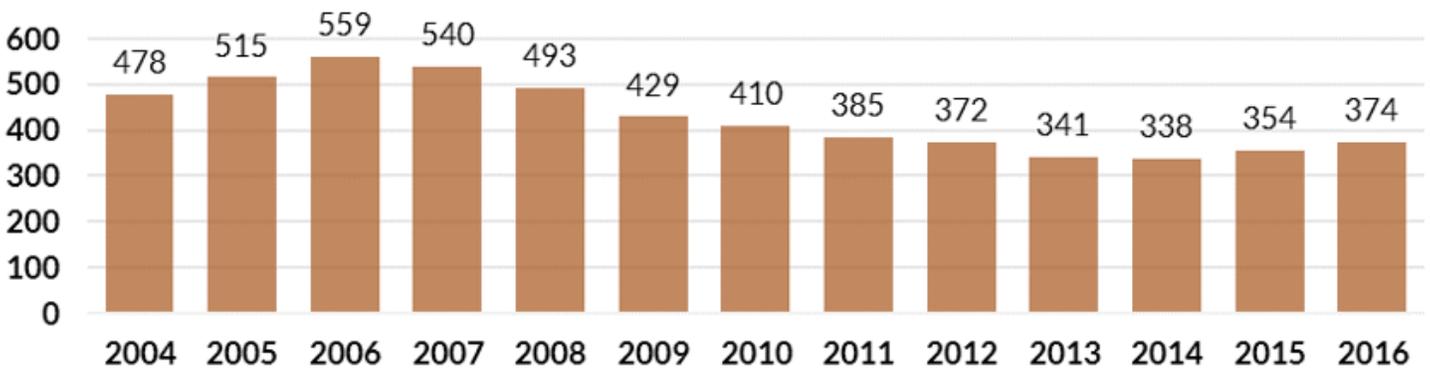
The average annual employment of Mining (except oil and gas) industry reached a recent peak of 559 jobs in 2006 (**Exhibit M4**). In 2016 there were 374 jobs, up slightly from 338 jobs in 2014.

Total wages paid in the industry reached \$31.3 million in 2007 (adjusted in 2016\$) before falling to \$19.7 million (adjusted in 2016\$) in 2014 (**Exhibit M5**). Through 2016, wages have increased to \$23.9 million (adjusted in 2016\$).

The average annual wage has been comparatively steady, averaging \$57,300 (adjusted in 2016\$) between 2004 and 2016 (**Exhibit M6**). In 2016, the average wage reached a recent historic high of \$63,800.

Exhibit M4. Average Annual Employment, Mining (except oil and gas), Western Washington, 2004 -2016

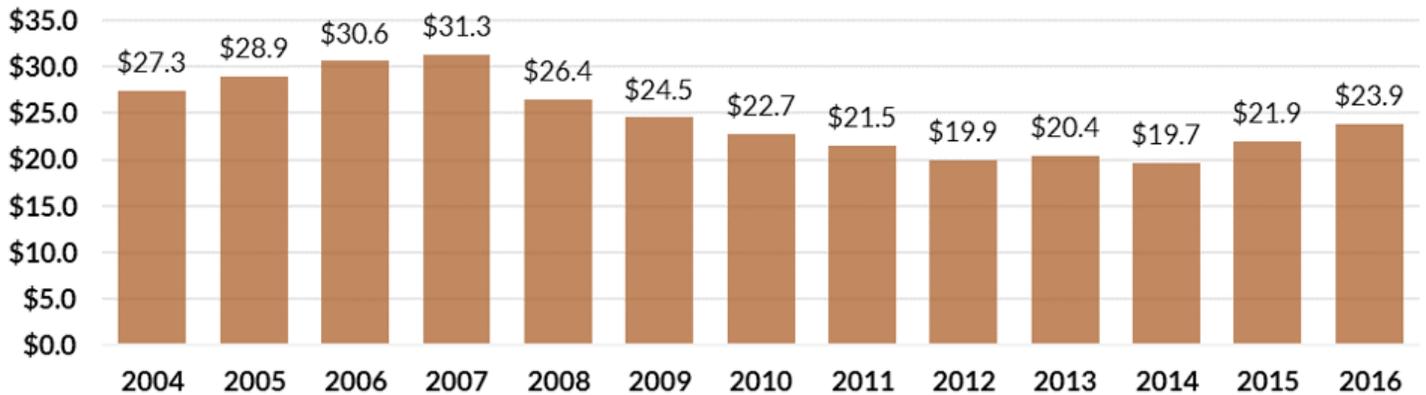
Jobs



Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

Exhibit M5. Total Wage Paid, Mining (except oil and gas), Western Washington, 2004-2016

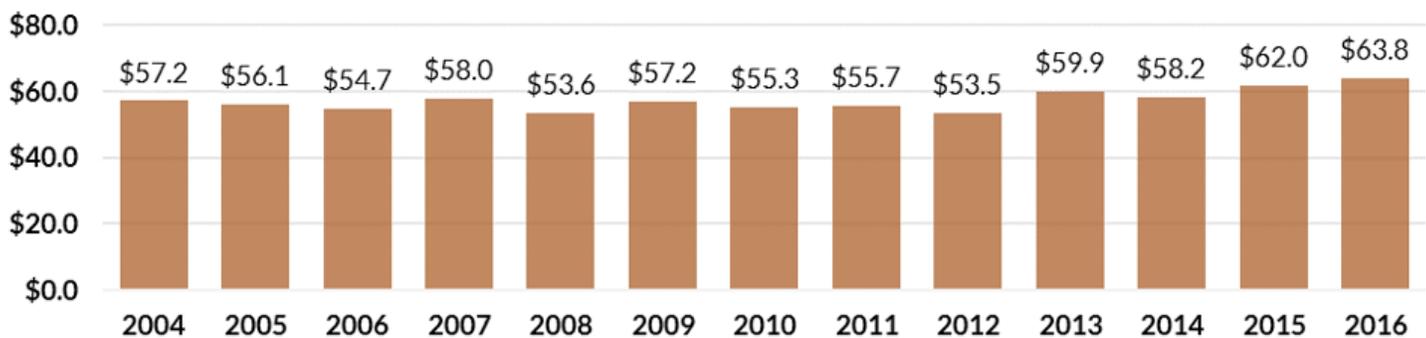
\$ 2016 Millions



Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

Exhibit M6. Average Annual Wage, Mining (except oil and gas), Western Washington, 2004-2016

\$ 2016 Thousands



Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

MINING LAND CHARACTERISTICS

The following exhibits illustrate the characteristics of mining lands in the County. Orcas Island has the largest acreage of mining lands in the County at almost 131 acres. Both San Juan and Lopez Islands have relatively significant acreages as well, with Decatur and Waldron both home to smaller acreages of land dedicated to mining.

Only 0.2% of land in San Juan County is used for mining. **Exhibit M7** details mining acres by island.

The total assessed value of mining lands in San Juan County is \$2.3 million, 44% of which is on Orcas Island and 47% on Lopez Island. The average of Mining land value of San Juan County is \$10,837 per acre. Within the five islands that have mining lands, Lopez has the highest average land value at \$30,583 per acre (**Exhibit M8**).

Exhibit M7. Mining Acreage by Island, San Juan County, 2017

Island	Acres
Orcas	130.8
San Juan	40.4
Lopez	35.5
Decatur	4.8
Waldron	3.4
Total	214.8

Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

Exhibit M8. Mining Land Value, San Juan County, 2017

Island	Land Value	Average Value / Acre
Orcas	1,024,600	\$7,836
San Juan	199,970	\$4,955
Lopez	1,085,380	\$30,583
Decatur	18,000	\$3,769
Waldron	0	\$0
Total	2,327,950	\$10,837

Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

QUALITATIVE ASSESSMENTS OF MINING IN SAN JUAN COUNTY

As part of this assessment, Community Attributes several stakeholders with knowledge of economic activities on resource lands. These interviews were supplemented by responses to an online survey, comments on an online map-based comment platform, and responses at a series of workshops and pop-up studios on San Juan, Orcas and Lopez islands. The themes that emerged from the comments are given below, and influence the recommendations provided for goal and policy development.

- Mining is an industry that needs to serve local needs first. The economics of export-oriented mining no longer work, but aggregate mining (e.g. sand and gravel) are still needed locally for construction, landscaping and other uses.
- Large-scale mining is unlikely to return due to the fact that most of what can be extracted for value, has already been extracted. Small-scale surface mining will likely persist and may grow slightly due to population growth and increasing demand for aggregate.
- There is a need to consider the long-term reuse of surface mines as they become unproductive.

ECONOMIC VIABILITY OF MINING IN SAN JUAN COUNTY

The following section is focused on the current and future viability of mining in the County. The analysis is centered around development of specific criteria to assess the current state of the industry and its relative importance to the local economy. The analysis also provides a review of growth forecasts for mining in the region.

VIABILITY CRITERIA

Economic viability for mining in San Juan County takes into how the county industry compares against Washington state and other industries in San Juan County. The metrics below assess San Juan County’s mining performance across the following categories:

- Number of establishments
- Average annual employment

- Average annual wages
- Projected future growth

Exhibit M9 illustrates the growth rate (measures on an annual basis) of wages in the mining industry in Western Washington.

Exhibit M9. Compound Annual Growth Rate Comparison, 2004 - 2016

	Mining, Western Washington	Mining, Washington State	All Industries, San Juan County
CAGR of Number of Establishments	-2.4%	-1.4%	0.7%
CAGR of Average Annual employment	-2.0%	-2.9%	0.6%
CAGR of Average Annual Wage (\$2016)	0.9%	0.5%	0.5%

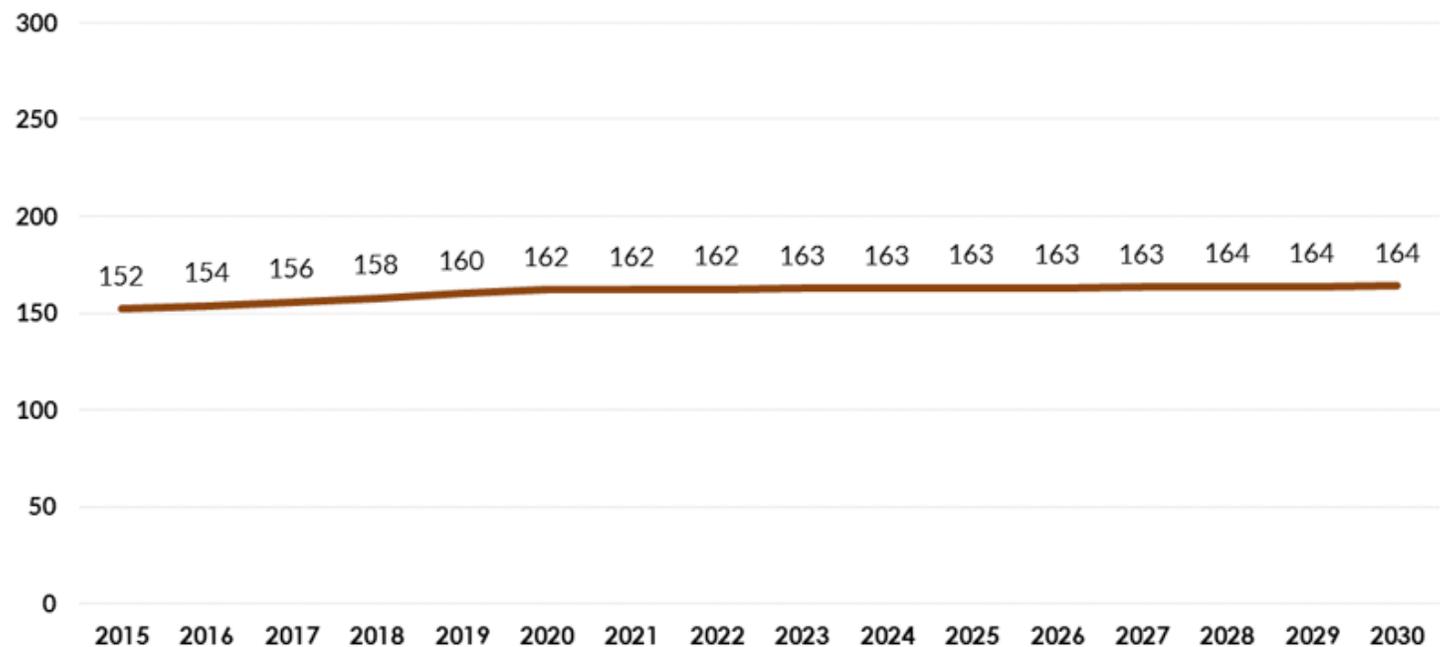
Source: Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

FUTURE GROWTH IN MINING

According to the Washington State Employment Security Department, the employment of Mining in Northwest Washington (Island, San Juan, Skagit and Whatcom Counties) will experience average annual growth of 1.3% per year through 2020 followed by just over 0.1%

between 2020 and 2025 (**Exhibit M10**). Mining jobs in Northwest Washington is projected to reach 162 jobs in 2020 and 164 jobs in 2030 (assuming the same growth rate as between 2020 and 2025 applies through 2030).

Exhibit M10. Historic and Forecast of Mining Employment, Northwest Washington, 2015-2030



Source: Washington State Employment Security Department, 2017; Community Attributes Inc., 2017.

APPLICATION OF VIABILITY CRITERIA

- Declining number of establishments. The number of mining establishment in San Juan County declined 2.4% per year between 2004 to 2016; a faster rate of decline than Washington state mining operations overall (Exhibit 9).
- Declining employment. Mining jobs fell 2.0% per year between 2004 and 2016 in San Juan County, though this was slower than the state average. The overall county workforce grew 0.6% per year during this period, meaning mining has experience a sizable decline in overall employment in the county (Exhibit 9).
- Long-term stability for small-scale producers. Demand for aggregate gleaned from surface mining activities will likely persist and may account for marginal employment growth.

IMPLICATIONS FOR MINING RESOURCE LAND POLICY

The following section offers insights and perspectives on mining policies in San Juan County. The section includes an assessment of land currently needed for mining based on current industry metrics/indicators as well as specific policy recommendations and observations.

MINIMUM LAND USE REQUIREMENTS FOR MINING

There is currently no resource land designation for mining. Mining lands are demarcated by an overlay zone. The current application criteria for landowners wishing to convert their land to mineral resource land are sufficient to ensure adequate supply of land on a case-by-case basis.

GOAL AND POLICY RECOMMENDATIONS

The existing goal and policy language from the 2010 Comprehensive Plan update is taken from the Land Use Element (B2) and reproduced below, with comments, potential revisions and possible additions. The comments, revisions and additions are based on an understanding of the economic vitality of the resource industry sectors in question, as well as trends in economic viability and input from key stakeholders.

Existing Comprehensive Plan Language	Recommendations
<p>2.5.A Mineral Resource Lands</p> <p>Goal:</p> <p>Assure that mineral resource lands of long-term commercial significance are conserved in order to provide continued and economical local access to valuable minerals, particularly those used for construction materials.</p>	<p>No changes suggested.</p>
<p>Policies (2.5.A.1-4):</p> <p>1. Upon application by a landowner, lands which are characterized by the following criteria may be designated as a Mineral Resource Land Overlay District on the Comprehensive Plan Official Maps:</p> <p>a. Have a known or potential extractable resource in commercial quantities verified by submittal of a geologic and economic report prepared by a qualified professional;</p> <p>b. Current or future land use will not exceed a residential density of one dwelling unit per ten acres;</p> <p>c. Are not within an Activity Center, Rural Residential, Natural or Conservancy designation or any Shoreline designation; and</p> <p>d. Are not within a wetland or fish and wildlife conservation area as defined in this Plan.</p>	<p>No changes suggested.</p>
<p>2. Protect mineral resource lands of long-term commercial significance from incompatible land uses and land use patterns so that access to existing and potential resources is maintained. With appropriate design and performance standards land uses such as agriculture, forestry and some industries, and low-intensity residential uses (average density at least ten acres per unit), are compatible with mineral extraction and processing while other uses such as medium- to high-intensity residential uses are not. Resource protection should be accomplished without loss of existing density potential.</p>	<p>No changes suggested.</p>

Existing Comprehensive Plan Language	Recommendations
<p>3. Existing and potential sources of sand, gravel, and rock vary in size and distribution; those which are most likely to provide for long term production with only minimal impact on the environment should receive the highest priority for protection through designation with a Mineral Resource Lands overlay district and attendant regulations to protect long-term access and use potential.</p>	<p>No changes suggested.</p>
<p>4. Allow those activities associated with long-term mineral extraction which enhance the commercial viability of extraction operations to locate within designated mineral resource lands, subject to performance standards to minimize negative impacts on the surrounding area.</p>	<p>One stakeholder mentioned (and multiple case studies reinforce) the need to proactively plan for mining lands after extraction activities cease. Consider an addition to the existing policies that includes language about planning for the adaptive reuse of mining resource lands once productive potential has been exhausted or extraction activities cease.</p>