




SAN JUAN COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT

135 Rhone Street, PO Box 947, Friday Harbor, WA 98250
(360) 378-2354 | (360) 378-2116
dcd@sanjuanco.com | www.sanjuanco.com

MEMO

MEMO DATE: April 2, 2021
TO: San Juan County Planning Commission
CC: Erika Shook, AICP, DCD Director
FROM: Adam Zack, Planner III 
SUBJECT: San Juan County Comprehensive Plan
Element B.2 Land Use and Rural
Natural Resource Land Designation Review
MEETING DATES: April 16, 2021 (Briefing)
May 21, 2021 (Planning Commission Discussion)
ATTACHMENT: A. April 2, 2021 Draft Natural Resource Land Designation Review Phase One and Two Results
B. Public Comments.
C. December 2017 Economic Analysis of Resource Lands

PROCESS: Discussion of the attached report will have multiple steps

- **April 16, 2021**, Staff will brief the Planning Commission on the attached report at their regular meeting April;
- **April 2 to May 21**, comment period on the contents of the Draft *Natural Resource Land Designation Review Phase One and Two Results (Report)*;
- **May 21, 2021**, the Planning Commission will discuss and provide comments on the discussion topics starting on page 36 of the *Report*; and
- **Summer 2021**, Planning Commission *Plan* Official Map Workshops and Work Sessions. Public hearings will follow the workshops and work sessions for additional public input before the Planning Commission makes a recommendation to the County Council.

PUBLIC COMMENTS: The public comment period on the Report runs from April 2 to May 21, 2021. Please send all public comments to compplancomments@sanjuanco.com. Please do not copy the County Council, Planning Commission members, or County staff. Written public comments received by May 20 will be provided to the Planning Commission. Please focus public comments on the discussion topics contemplated in the *Report*.

BACKGROUND: The County is required by the Growth Management Act (GMA) to review natural resource land designations, policies, and development regulations during the mandated periodic review (WAC 365-196-480(1)(b)). Reviewing natural resource land designations must be done on an area-wide basis. The County is not required to reevaluate the entire designation process and should primarily focus on consistency with the *Plan* designation criteria (WAC 365-196-480(2)(e)). The attached draft *Report* provides the results of the first two phases of evaluation of natural resource land designations during the *Plan* update. Appendix A of the Report includes the methodology used in the designation review. The Planning Commission was briefed on natural resource lands, the methodology for this designation review, and corresponding policies in 2020.

Two previous staff memos provided additional information about natural resource lands and the designation review process.

- September 3, 2020 Natural Resource Lands Staff Report for September 18 Planning Commission meeting <https://www.sanjuanco.com/DocumentCenter/View/21090/>
- December 29, 2020 Natural Resource Land Goals and Policies Staff Report for January 15, 2021 Planning Commission Meeting <https://www.sanjuanco.com/DocumentCenter/View/21615/>

The attached *Economic Analysis of Resource Lands* is provided for additional background (Attachment C). This report was prepared by consultants from Community Attributes Incorporated (CAI) in 2017. The purpose of the *Economic Analysis of Resource Lands* is to provide information about the economic vitality of resource industries in the County and makes policy recommendations. Comments on the report in Attachment C are not necessary during the discussion at the May Planning Commission meeting. The *Economic Analysis of Resource Lands* is attached to this memo for additional context and to make sure that new members of the Commission have the opportunity to review this material.

The primary purpose of the *Report* is to confirm that the natural resource land designations on the *Plan* Official Maps meet the *Plan* and GMA designation criteria. The purpose of this review is provided in WAC 365-196-480(2)(e), which states:

(e) The review of existing designations should be done on an area-wide basis, and in most cases, be limited to the question of consistency with the comprehensive plan, rather than revisiting the entire prior designation and regulation process. However, to the extent that new information is available or errors have been discovered, the review process should take this information into account. Review for consistency in this context should include whether the planned use of lands adjacent to agricultural, forest, or mineral resource lands will interfere with the continued use, in an accustomed manner and in accordance with the best management practices, of the designated lands for the production of food, agricultural products, or timber, or for the extraction of minerals.

During Phase Three, the Planning Commission and County Council will consider whether the natural resource land designations are consistent with the Comprehensive Plan goals and policies. The analysis detailed in the attached report comprises the first two phases of a four-phase process to guide that consideration.

After reviewing the results of this countywide review, staff has found, in general, the first two phases of the analysis confirm the designations are consistent with the proposed Comprehensive Plan goals and policies. No other changes to natural resource land designations are recommended beyond those contemplated in the submitted land use review requests discussed below.

LAND USE REVIEW REQUESTS: Throughout the *Plan* update, property owners have submitted requests for changes to their land use map designations or densities. Requests were submitted through the annual docket and by property owners requesting designation changes through public comments. Several of these requests asked for changes to natural resource land designations. Those requests are analyzed in the attached report

The focus of the Phase Three discussion, including public input, will be directed at reviewing the requests for natural resource land designation changes that have been submitted by property owners. The land use review requests submitted by property owners will be analyzed based on the criteria for making natural resource land designation changes in WAC 365-190-040(10), other criteria from the GMA, and the Comprehensive Plan policies. The analysis is provided in the *Report*. That section will be laid out as follows:

- The 2019 aerial photograph of the parcel;
- The Comprehensive Plan Official Map land use designation for the parcel and neighboring areas;
- A table with a summary of the request that includes a link to the request form submitted by the property owner;
- Staff analysis; and
- Staff recommendation.

NATURAL RESOURCE LAND DESIGNATION REVIEW METHODOLOGY: The Methodology for this analysis is included in Appendix A of the *Report*. The Planning Commission has already been briefed and provided their comments on the Methodology at their meeting on September 18, 2021. Since that meeting, some minor changes the Methodology have been made. These minor changes are shown in ~~strikeout~~/underline format (~~Removal~~, Addition). The changes are primarily to ensure that the Methodology is consistent with the planned public process and to increase the clarity in some of the steps. The minor edits for clarity and consistency include:

- Edits to the tables in Phase One, Step One;
- Changes to Phase Two, Step Three to clarify how the results will be provided;
- Phase Three was amended to account for the public participation plan addendum provided with a staff memo dated March 4, 2021; and
- Changes to Phase Four to clarify how it will fit with the new public participation process as detailed in Phase Three.

NEXT STEPS

- Brief County Council on the *Report*, get their input, and develop a preliminary draft of possible map changes to get comments at public workshops;
- Get public input on proposed changes during the public workshops;
- After getting input from the public, the Planning Commission can refine their proposal;
- Staff prepares in-depth analysis of proposed map changes (Phase Four); and
- Amendments proceed to public hearing with the rest of the Comprehensive Plan update.



San Juan County Washington

Natural Resource Land Designation Review

Phase One and Two Results

Department of Community Development
Adam Zack, Planner III
April 2, 2021

The maps and analysis in this report are for planning purposes only.
The information contained herein cannot be used for permitting or evaluation of site-specific
development proposals.

2021 San Juan County Department of Community Development



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Introduction

San Juan County is conducting a periodic review of its comprehensive plan. The Growth Management Act (GMA) requires review of natural resource land designations during the periodic review of the San Juan County Comprehensive Plan (*Plan*). The County is not required to revisit the entire designation process but rather, evaluate designations for consistency with the GMA and the *Plan* designation criteria (Washington Administrative Code (WAC) 365-196-480(2)(e)).

Purpose

The purpose of the Natural Resource Land Designation Review is to satisfy the GMA requirement that the County review existing natural resource land designations on a countywide basis. This requirement is established in WAC 365-196-480(1)(b) and (2)(e), which state:

(b) Counties and cities planning under the act must review their natural resource lands designations, comprehensive plans, policies, and development regulations as part of the required periodic update under RCW 36.70A.130(1) and 36.70A.131.

[...]

(e) The review of existing designations should be done on an area-wide basis, and in most cases, be limited to the question of consistency with the comprehensive plan, rather than revisiting the entire prior designation and regulation process. However, to the extent that new information is available or errors have been discovered, the review process should take this information into account. Review for consistency in this context should include whether the planned use of lands adjacent to agricultural, forest, or mineral resource lands will interfere with the continued use, in an accustomed manner and in accordance with the best management practices, of the designated lands for the production of food, agricultural products, or timber, or for the extraction of minerals.

The central question contemplated in this report is whether the existing natural resource land designations are consistent with the *Plan* goals and policies. The analysis contained herein is focused on this central question rather than revisiting the entire prior designation and regulation process. To that end, this report will answer that central question of consistency with the *Plan* and provide analysis of the submitted land use designation review requests that members of the public have submitted throughout the *Plan* update.

Summary of Report Conclusion

After reviewing the results of the countywide review in Phases One and Two, staff has found, in general, the analysis confirms the designations are consistent with the Comprehensive Plan goals and policies. No other changes to natural resource land designations are recommended beyond those contemplated in the submitted land use review requests considered in the Phase Three discussion section of this report. This conclusion is discussed further on page 35 of this report.

Phased Approach

The *Natural Resource Land Designation Review Methodology* (Methodology) in Appendix A has four phases. The four phases are:

- Phase One:** Countywide analysis of GMA designation criteria for all parcels.
- Phase Two:** Countywide analysis of the local designation criteria for all tax parcels.
- Phase Three:** Obtain public input on potential re-designations.
- Phase Four:** Analyze potential re-designations and prepare Official Map alternatives.

This report summarizes the results from Phases One and Two. The final section of this report highlights results from Phases One and Two that require additional input from the County Council, Planning Commission, and public in Phase Three.

Feedback on the contents of this report will comprise Phase Three of the analysis. After receiving further direction during Phase Three, staff will move on to Phase Four of the Methodology. Phase Four will include in-depth analysis of each potential designation change for consistency with the applicable GMA requirements and local policies. It is important for readers of this report to remember that Phase Four includes additional, in-depth, and site-specific analysis that will be based on the countywide analysis in the first two phases of the review.

Data Sources

The review of natural resource land designations used the following data sources:

- **San Juan County (SJC) Plan Official Maps (Official Maps).** The Official Maps of the *Plan* identify existing land use designations. <https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/comprehensive-plan-land-use>
- **SJC Parcel Data.** This is a GIS data set regularly updated by the SJC Assessor's office and provides numerous characteristics of each parcel including Assessor's use codes, acreage and location. <https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/parcels>
- **SJC Assessor's Tax Map.** The tax map depicts parcels that are enrolled in the current-use and open-space tax programs.
- **United States Department of Agriculture Natural Resource Conservation Service (NRCS) Soil Maps.** The NRCS soil maps show the location and extent of the soils that are best suited to agricultural production. These maps have been updated and made web-based since the last Land Use Element was adopted. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- **Washington State Department of Natural Resources (WDNR) Private Forest Land Grade (PFLG) Maps.** The PFLG maps shows the location and extent of forest soils. The WDNR, Natural Resources Conservation Service (NRCS) (previously the Soil Conservation Service), USDA Forest Service and Washington State University developed the PFLG using national soil survey standards. <http://data-wadnr.opendata.arcgis.com/datasets/wa-soils>

- **SJC Voluntary Stewardship Program (VSP) farm map.** The SJC Conservation District generated this map during the development of the VSP, a program to manage growth, protect critical areas, and maintain viable agriculture. The VSP farm map shows the location and type of agricultural occurring on existing farms in 2017.

Phase One Results

Phase One of the Methodology establishes the degree to which every parcel in the County might meet the Growth Management Act (GMA) designation criteria in Chapter 365-190 WAC. Phase One has three steps:

- **Step One:** Calculate the Long-Term Commercial Significance Index for all parcels;
- **Step Two:** Remove parcels characterized by urban growth from consideration; and
- **Step Three:** Identify parcels used or capable of being used for resource production.

Long-Term Commercial Significance Index (LCSI)

The principal metric considered during Phase One is the Long-Term Commercial Significance Index or LCSI. The LCSI quantifies the GMA natural resource land long-term commercial significance criteria for agricultural and forestry lands from Chapter 365-190 WAC. The LCSI is a fifty-point scale where a higher score indicates greater commercial significance based on the GMA criteria. During Phase One, each parcel was awarded an Agricultural (AG) LCSI and a Forestry (FO) LCSI. A complete explanation of how the AG and FO LCSI were calculated is provided in the Methodology in Appendix A.

Phase One AG Results

The Phase One results for agricultural long-term commercial significance are summarized in Table 1 below. Figure 1 is a histogram showing the distribution of AG LCSI scores for all parcels. Maps 1 through 3 show parcels with an AG LCSI above the commercial significance threshold.

AG LCSI Commercial Significance Threshold

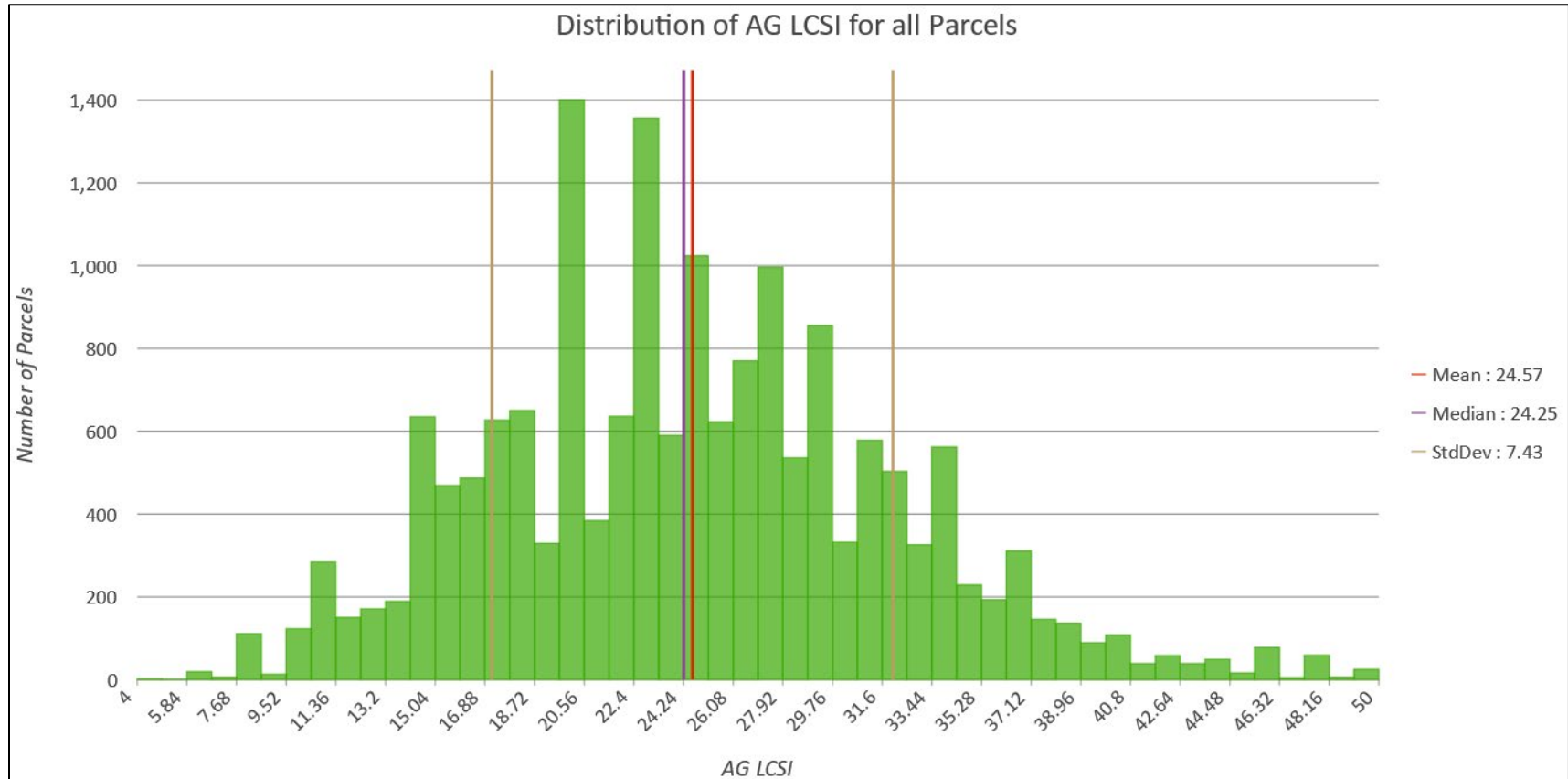
Lands with an AG LCSI score greater than or equal to 38 were considered commercially significant. On a traditional letter grading scale 38 out of 50 points is a 76 percent or a “C”. The average AG LCIS score on the 17,324 parcels in the County was 24.57. If the AG LCSI is graded on a curve where the mean score is 24.57, a score of 38 is a 96 percent, or a very solid “A”. When grading on a curve, the mean score becomes the “C” or average grade. Therefore, parcels with an AG LCSI score greater than or equal to 38 are highlighted on maps 1 through 3.

Table 1. Phase One AG LCSi Results Summary.

Parcel Category	Mean AG LCSi	Median AG LCSi	Mean Parcel Size
All Parcels	24.57	24.25	6.5
Current-Use Farm and Agriculture or Open Space Farm Conservation	43.70	44.25	29.42
Voluntary Stewardship Program (VSP) Mapped Farms	40.31	41.5	25.61
Designated Agricultural Resource	38.97	38.75	20.3

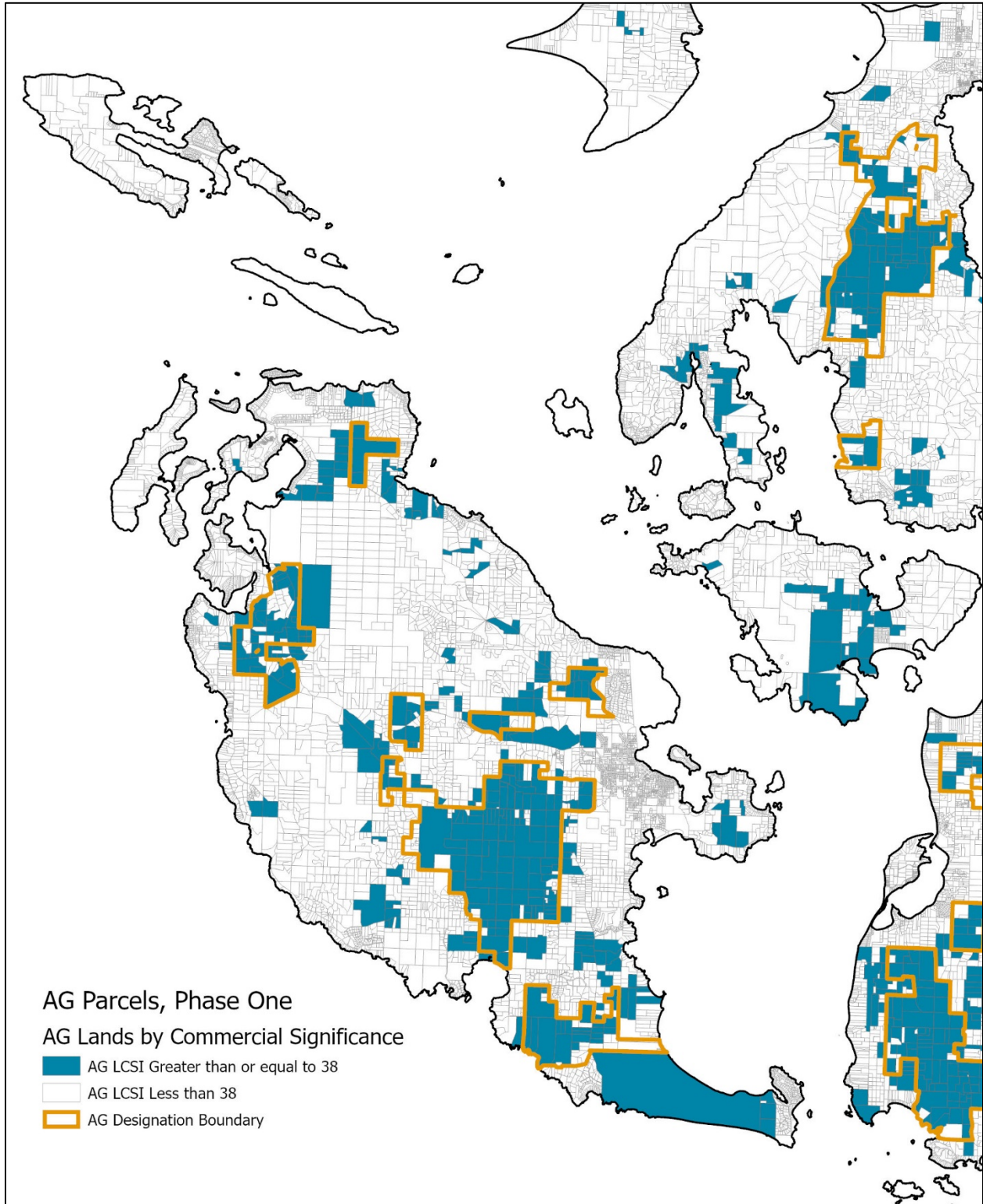
Source: SJC GIS.

Figure 1. AG LCSi Distribution for all Parcels.



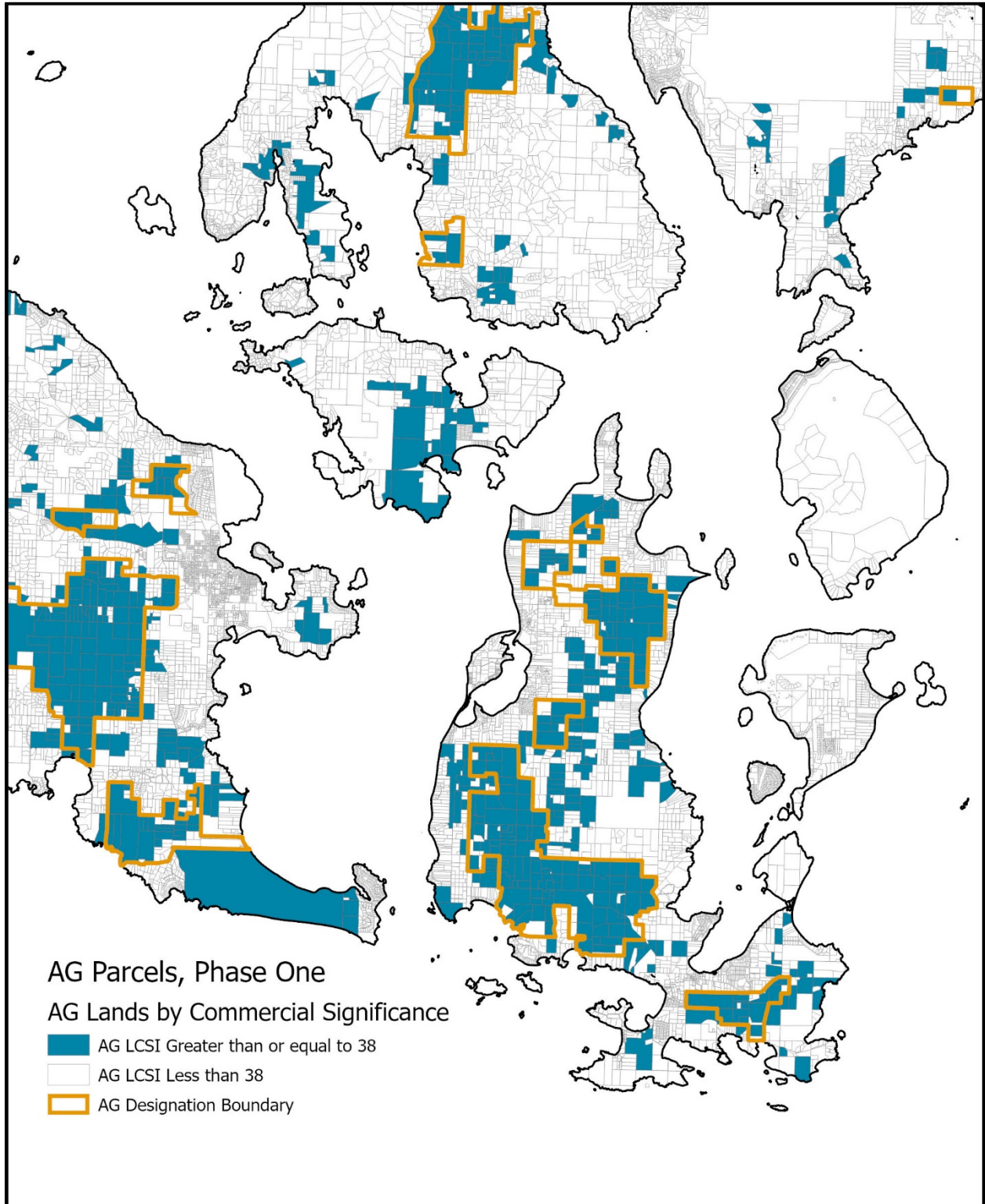
Source: SJC GIS.

Map 1. Commercially Significant AG Lands on San Juan and Surrounding Islands.



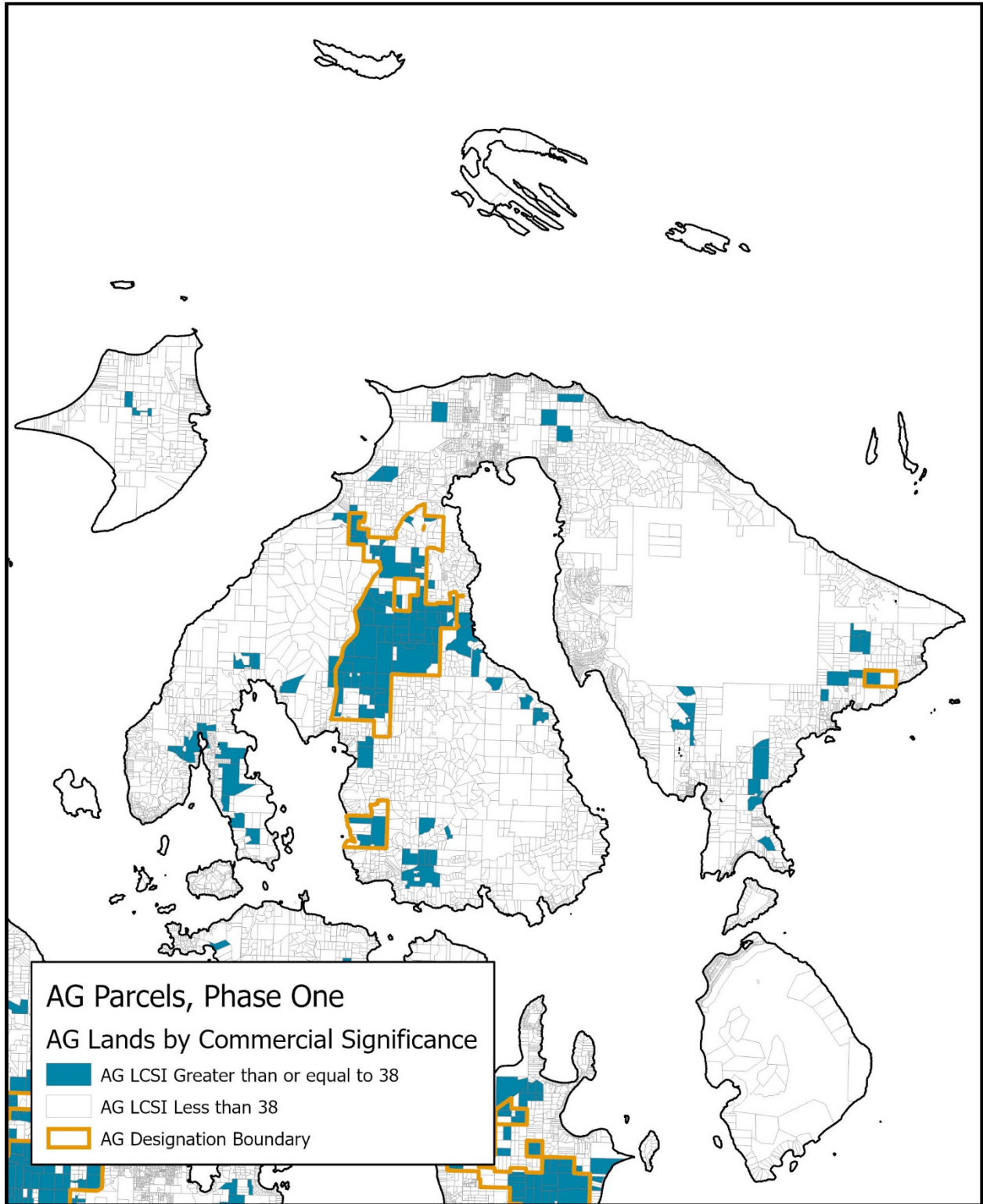
Source: SJC GIS.

Map 2. Commercially Significant AG Lands on Lopez and Surrounding Islands.



Source: SJC GIS.

Map 3. Commercially Significant AG Land on Orcas and Surrounding Islands.



Source: SJC GIS.

Phase One FO Results

The Phase One results for forestry long-term commercial significance are summarized in Table 2 below. Figure 2 is a histogram showing the distribution of FO LCSIs scores for all parcels. Maps 4 through 6 show parcels with an FO LCSI above the commercial significance threshold.

FO LCSI Commercial Significance Threshold

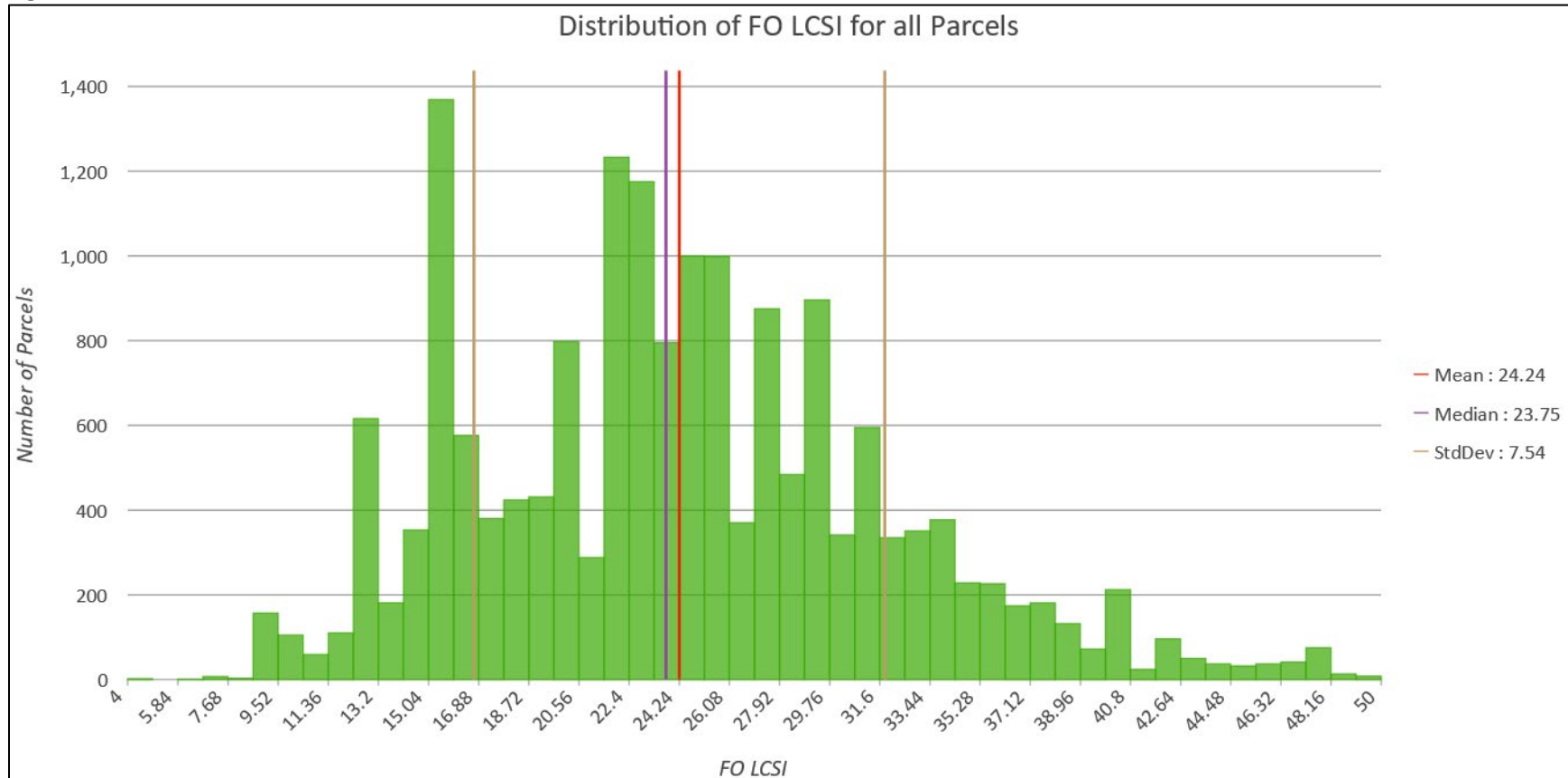
Lands with an FO LCSI score greater than or equal to 38 were considered commercially significant. On a traditional letter grading scale 38 out of 50 points is a 76 percent or a “C”. The average FO LCIS score on the 17,324 parcels in the County was 24.24. If FO LCSI is graded on a curve where the mean score is 24.24, a score of 38 is in the 96th percentile, or a very solid “A”. When grading on a curve, the mean score becomes the “C” or average grade. Therefore, parcels with an FO LCSI score greater than or equal to 38 are highlighted on maps 4 through 6.

Table 2. Phase One FO LCS I Results Summary.

Parcel Category	Mean FO LCS I	Median FO LCS I	Mean Parcel Size
All Parcels	24.24	23.75	6.5
Current-Use or Designated Forest Land Taxation	43.42	43.75	34.25
Designated Forest Resource Land	34.17	33.75	25.13

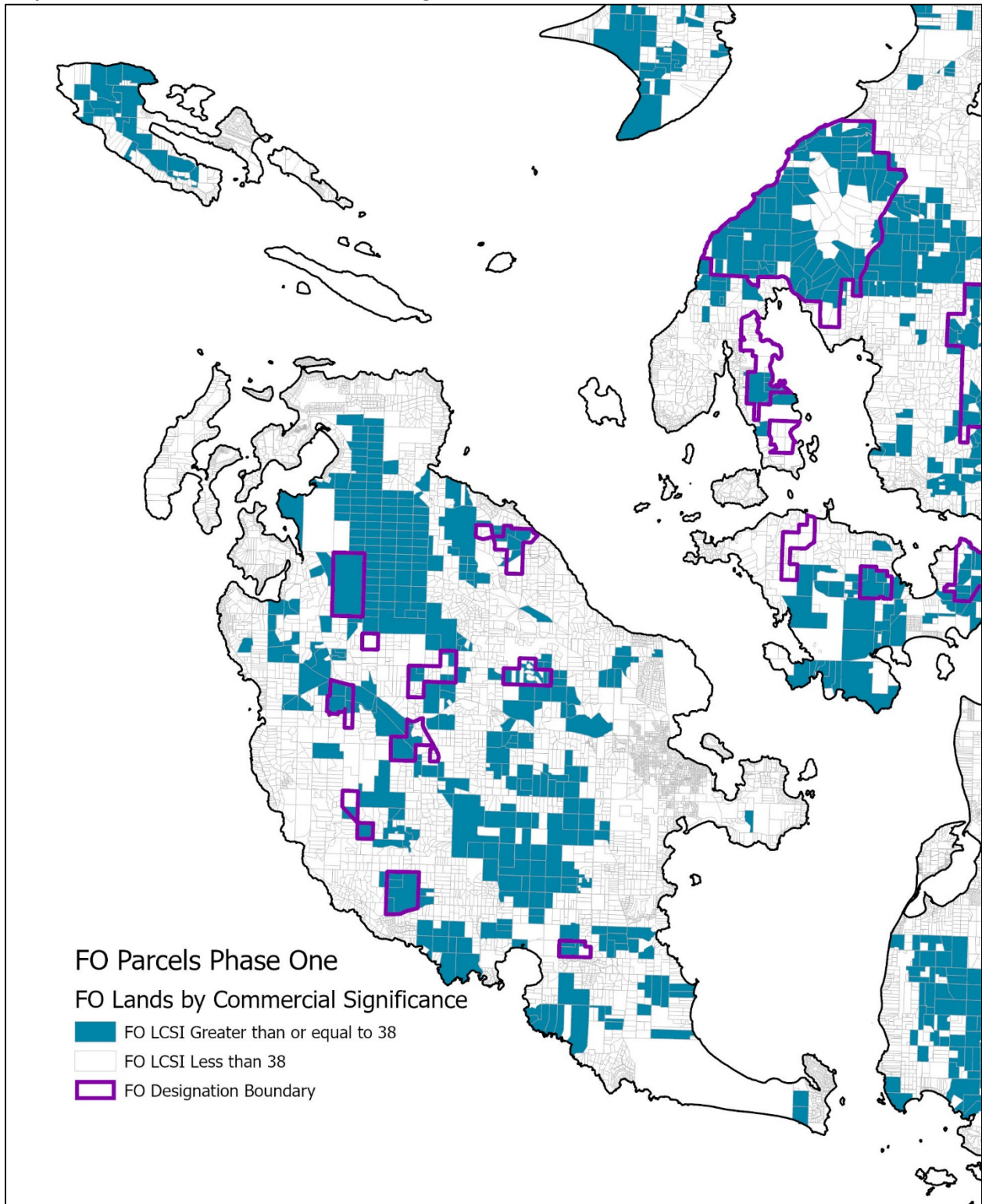
Source: SJC GIS

Figure 2. Distribution of FO LCS I for all Parcels.



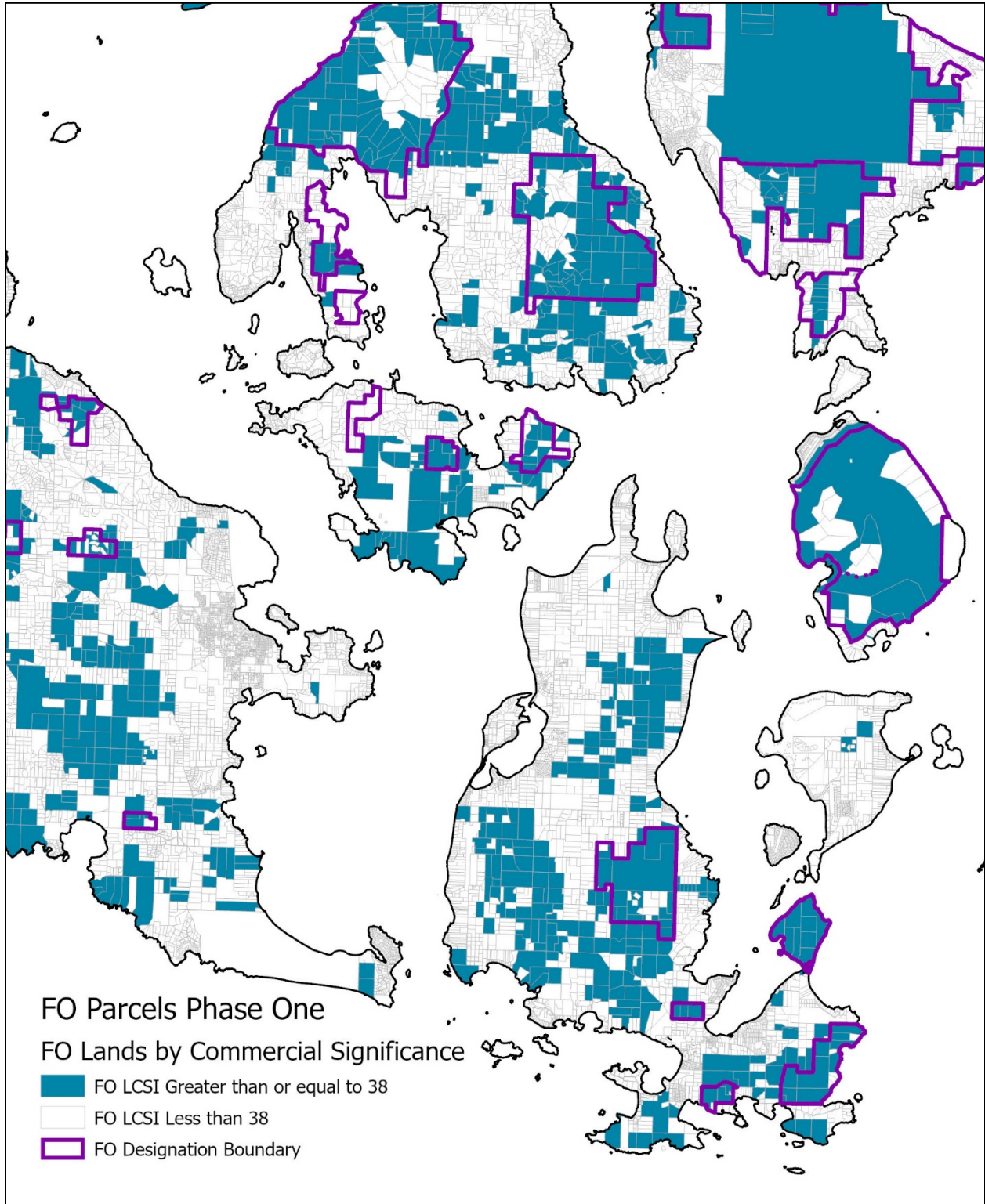
Source: SJC GIS.

Map 4. FO LCSI on San Juan and Surrounding Islands.



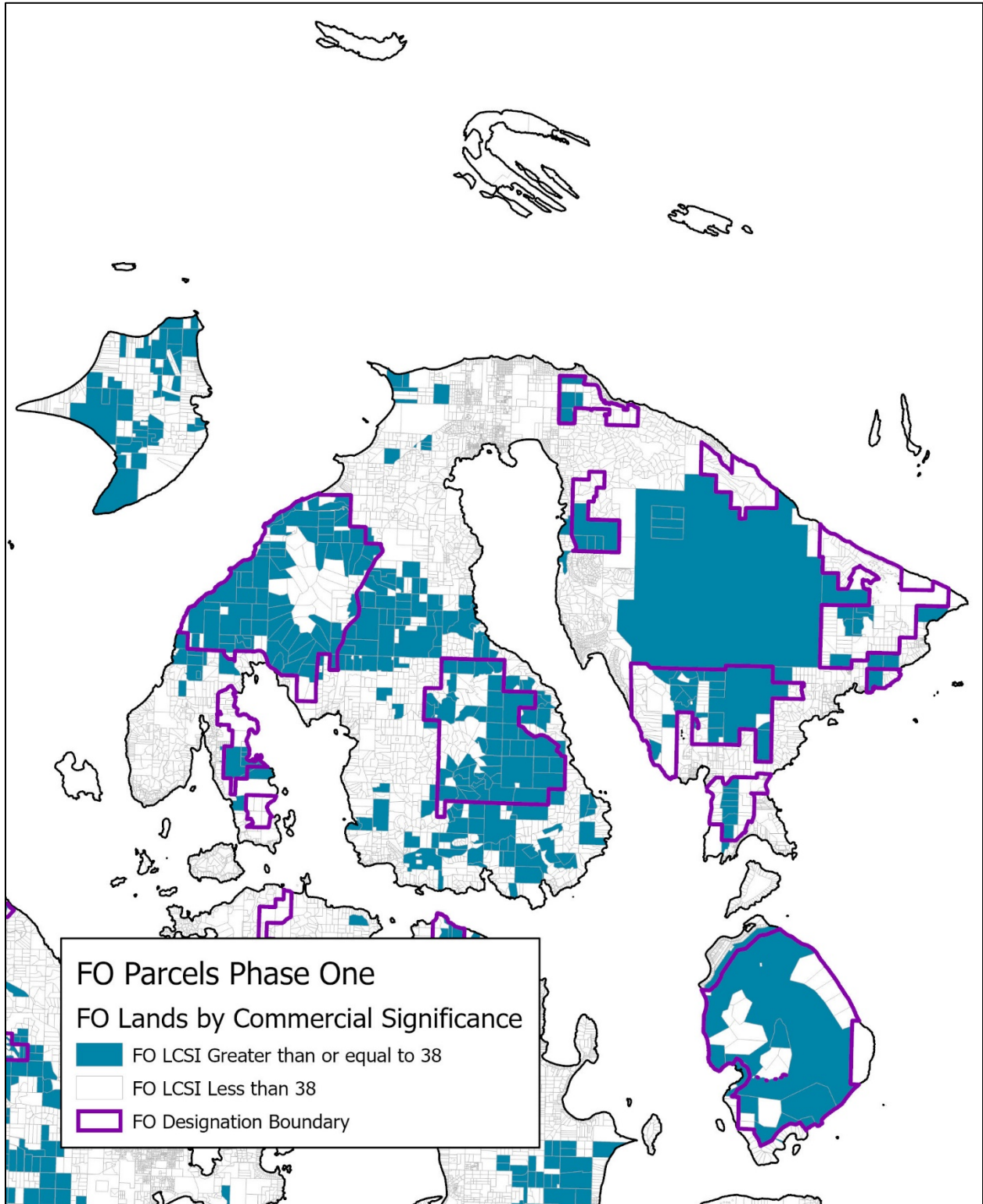
Source: SJC GIS.

Map 5. FO LCSI on Lopez and Surrounding Islands.



Source: SJC GIS.

Map 6. FO LCSI on Orcas and Surrounding Islands.



Source: SJC GIS.

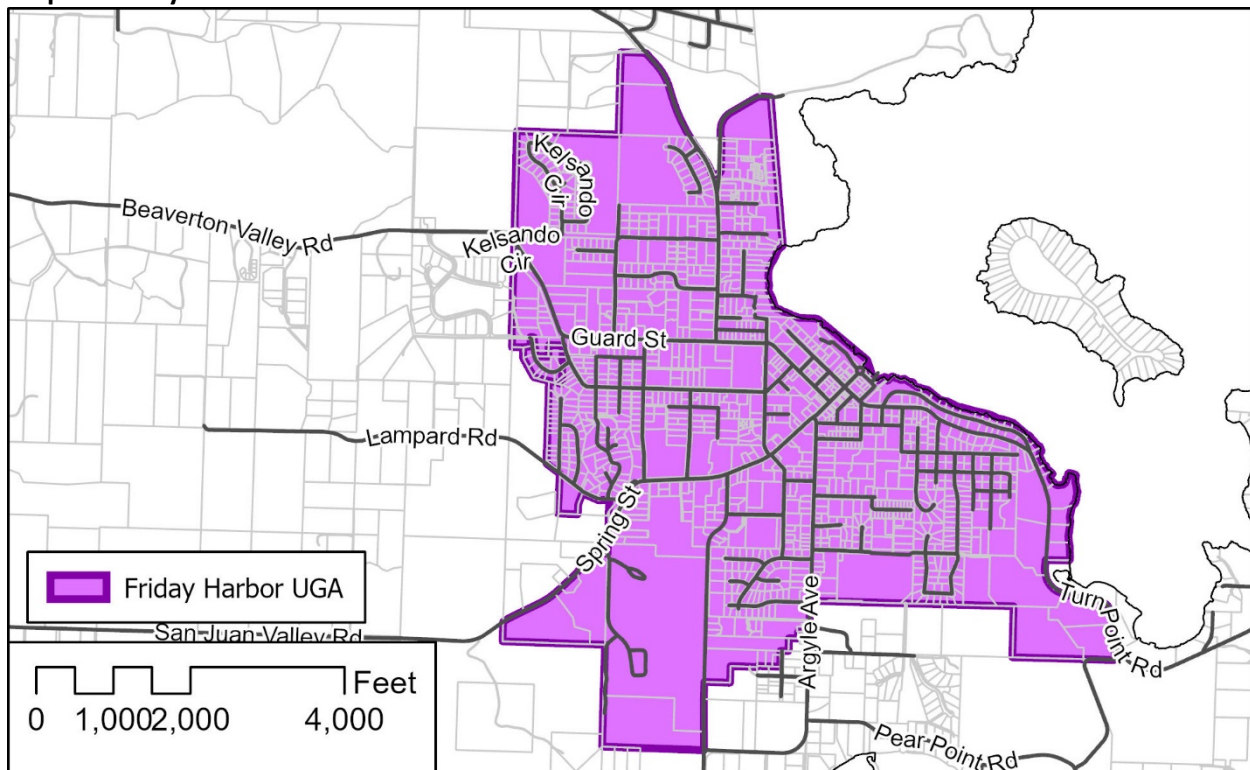
Phase One, Step Two Results – Removed UGAs

During Phase One, Step Two, parcels characterized by urban growth were removed from consideration for designation as natural resource lands. Urban growth and characterized by urban growth are defined in RCW 36.70A.030(25) Definitions as:

"Urban growth" refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources, rural uses, rural development, and natural resource lands designated pursuant to RCW 36.70A.170. A pattern of more intensive rural development, as provided in RCW 36.70A.070(5)(d), is not urban growth. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth.

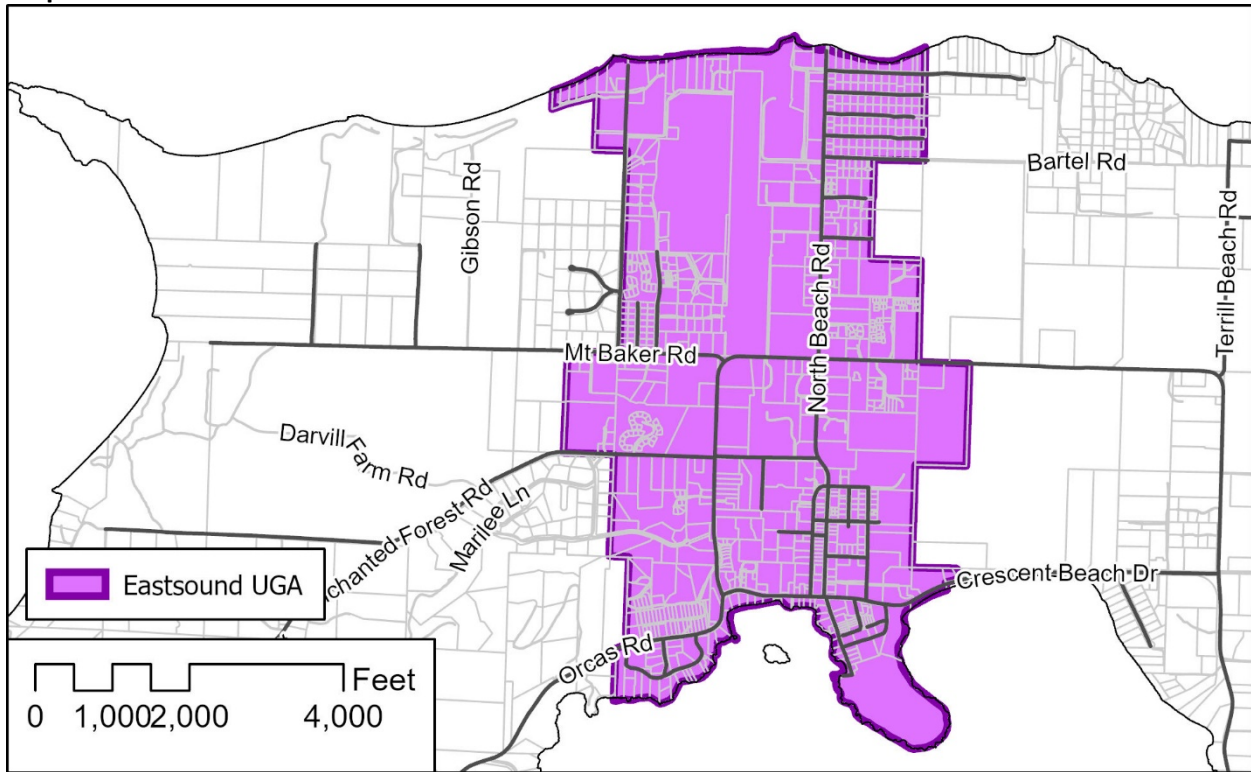
Maps 7 through 9 below show the urban growth areas (UGAs) and surrounding lands in the County. Areas within the UGAs will not be considered for designation as natural resource lands. The areas that might qualify for designation and are adjacent to the UGAs will need to be analyzed to ensure that the County is not designating natural resource lands in areas characterized by urban growth. This area-specific analysis will be conducted later in the analysis as needed during Phase Four.

Map 7. Friday Harbor Urban Growth Area.



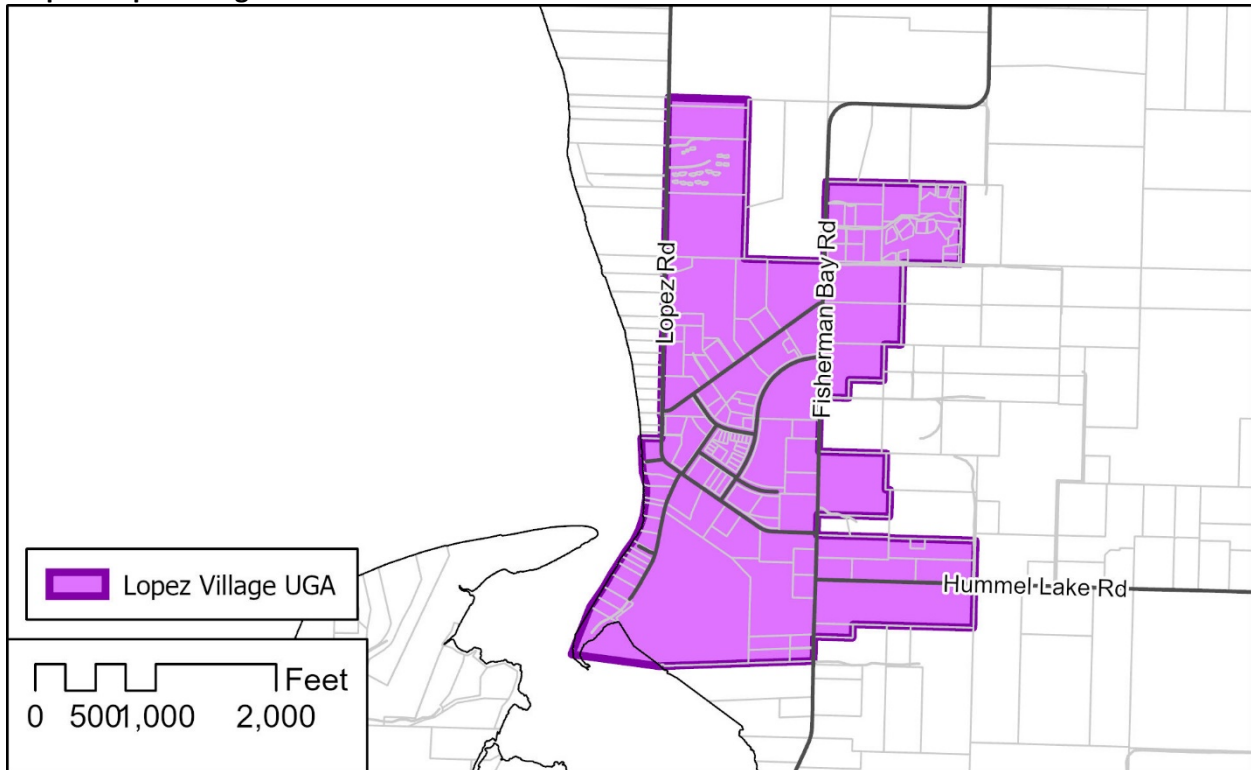
Source: SJC GIS.

Map 8. Eastsound Urban Growth Area.



Source: SJC GIS.

Map 9. Lopez Village Urban Growth Area.



Source: SJC GIS.

Phase One, Step Three Results – Lands used or capable of being used for natural resources

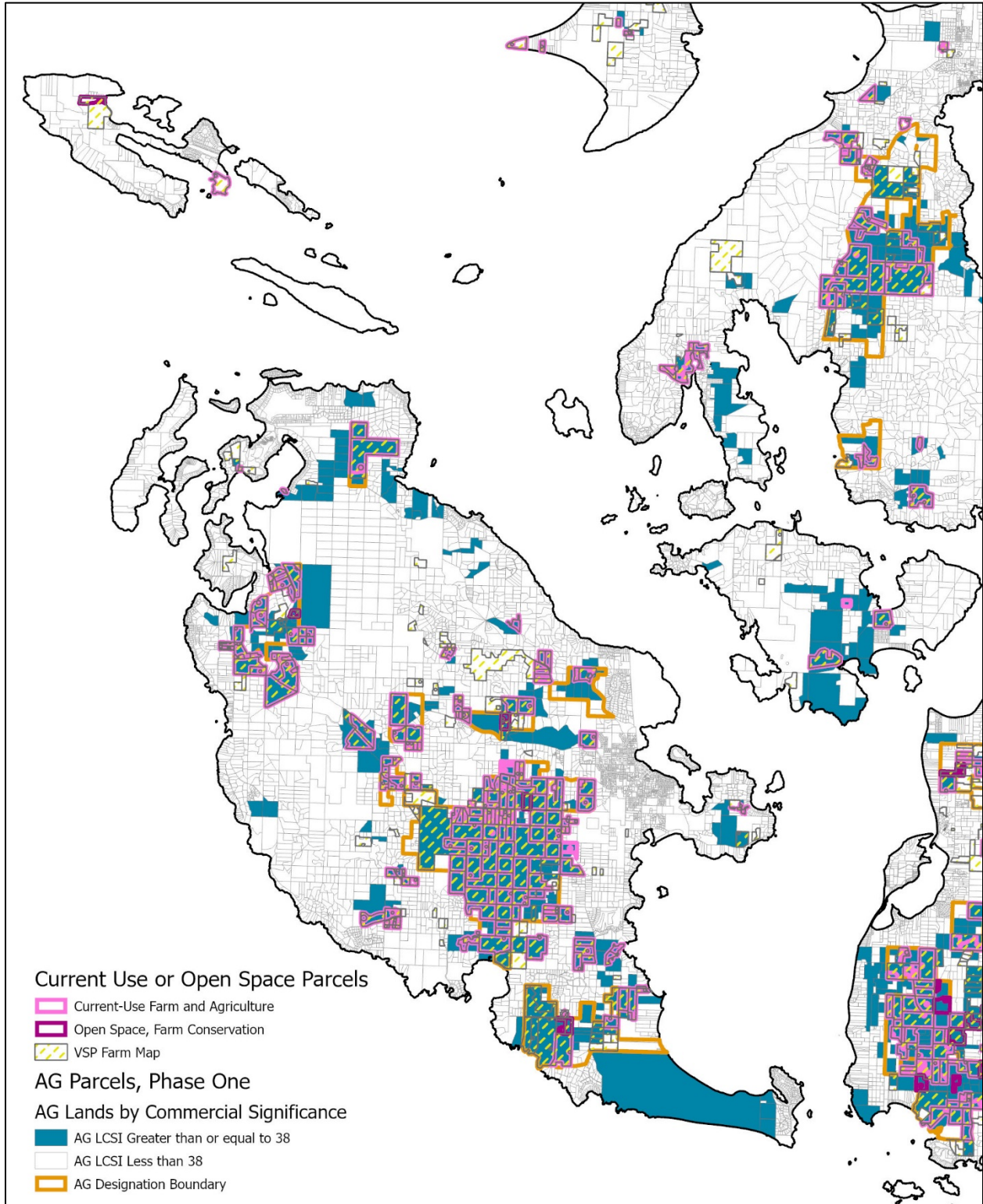
During Phase One, Step Three, parcels that might be used or capable of being used for production of natural resources were identified. Two data sources were joined with the parcel data from Phase One, Step One to produce the maps below showing parcels currently used for resource production.

First, parcel data was joined with the Voluntary Stewardship Program (VSP) farm map from 2017. The San Juan Islands Conservation District generated this map during the development of the VSP, a program to manage growth, protect critical areas, and maintain viable agriculture. The VSP farm map shows the location and type of agricultural occurring on existing farms in 2017.

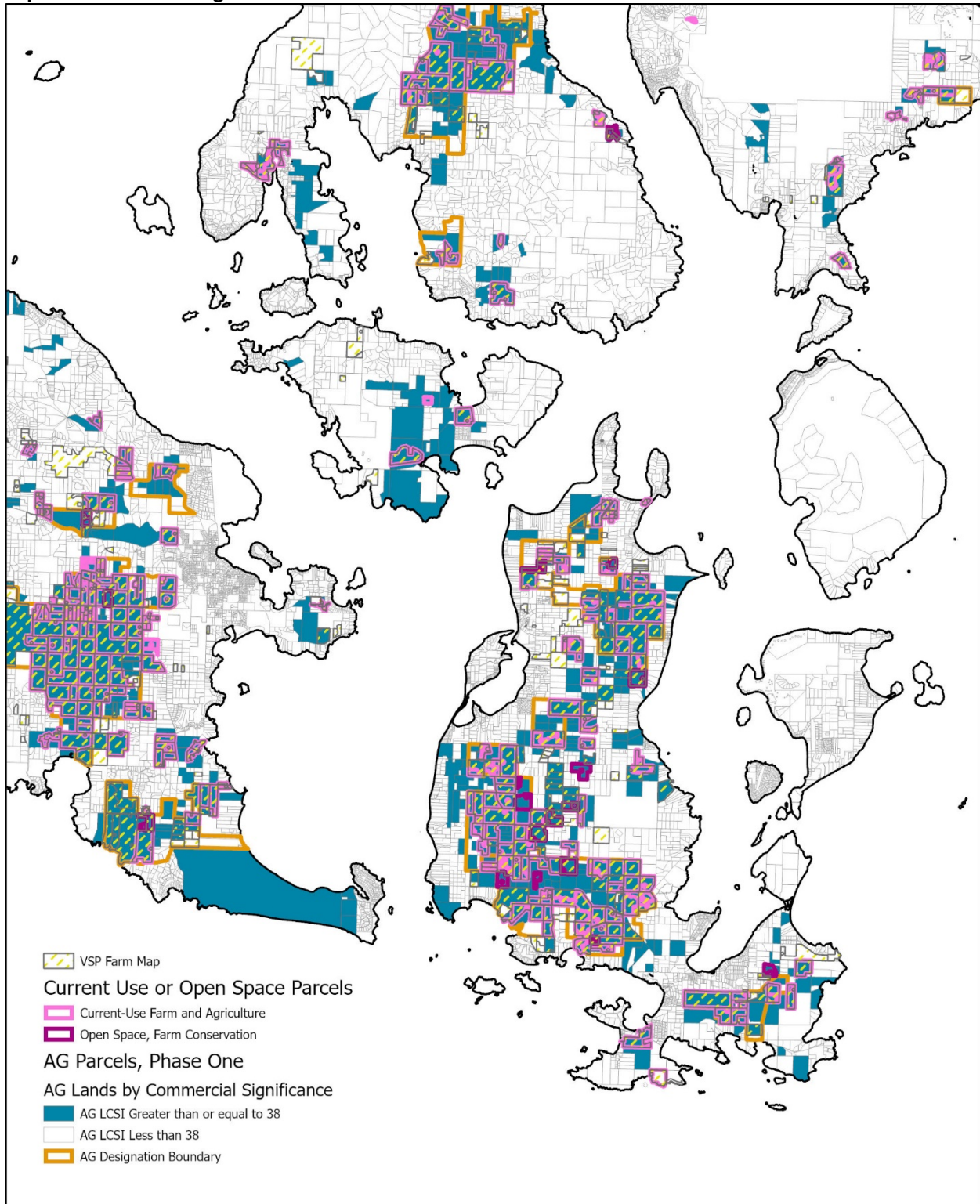
Next, the parcel data was joined with the County Assessor's tax map. The tax map depicts parcels that are enrolled in the Current-Use Farm and Agriculture or Designated Forest Land tax programs. Parcels that participate in these tax programs must be currently used for agriculture or forestry in order to get a special tax assessment. Participation in these programs is a strong indicator that the land is currently used for production of resource products.

Maps 10 through 15 show the LCSi for parcels that either show up as farms on the VSP maps or are enrolled in tax programs; suggesting they are used for resource production.

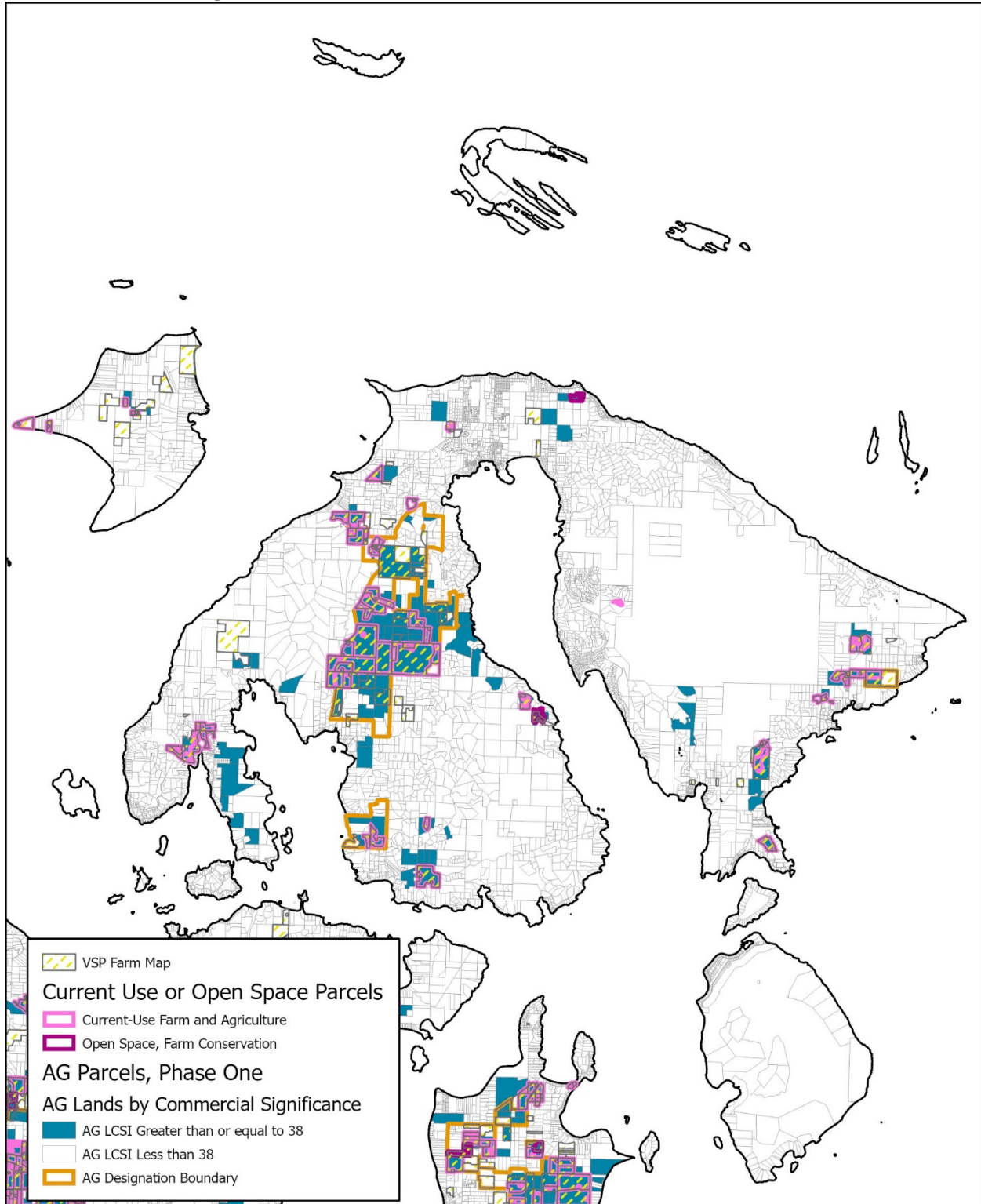
Map 10. AG LCSI on Parcels in Current-Use Tax Program or on the Voluntary Stewardship Plan Maps – San Juan and Surrounding Islands.



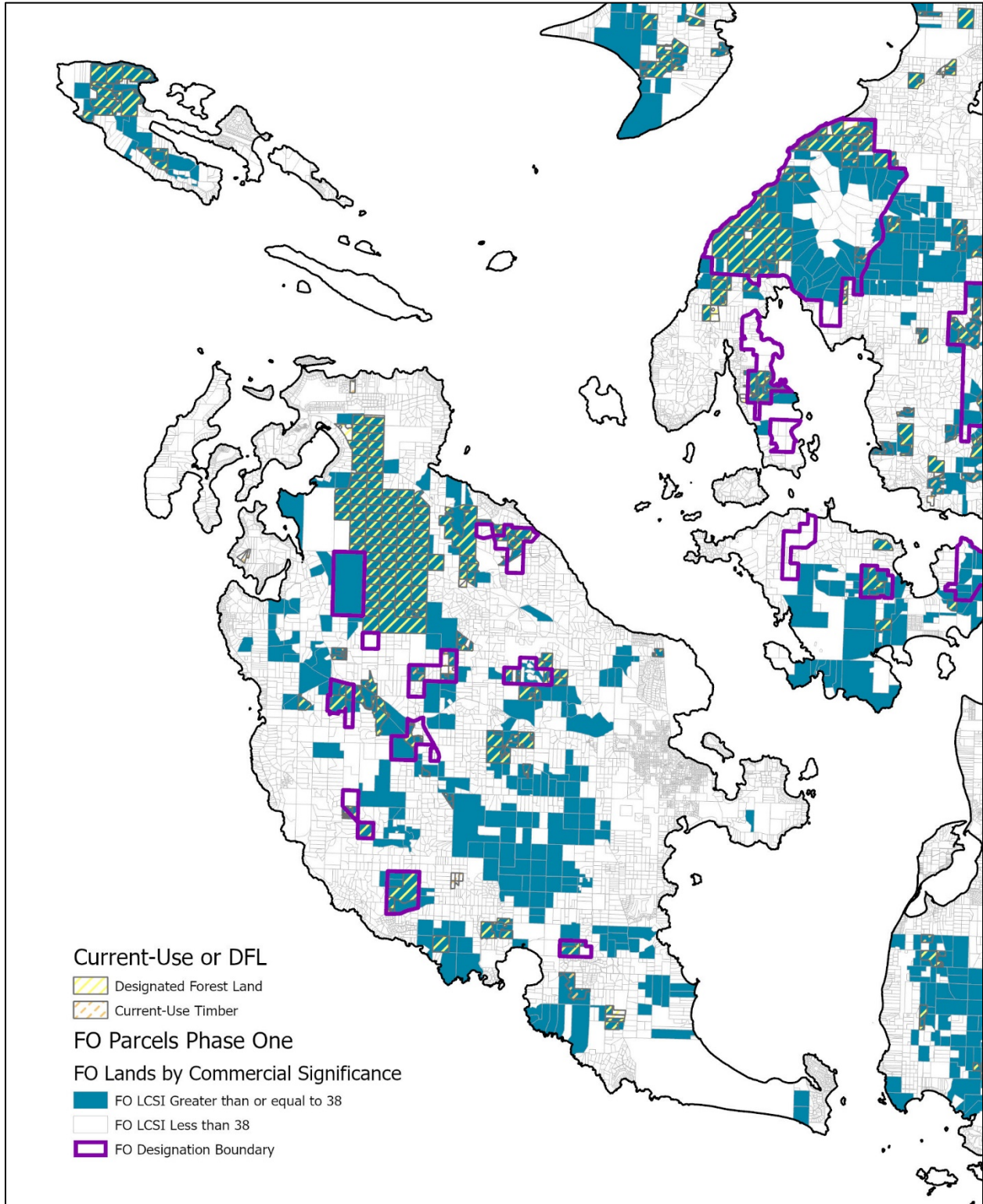
Map 11. AG LCSI on Parcels in Current-Use Tax Program or on the Voluntary Stewardship Plan Maps – Lopez and Surrounding Islands.



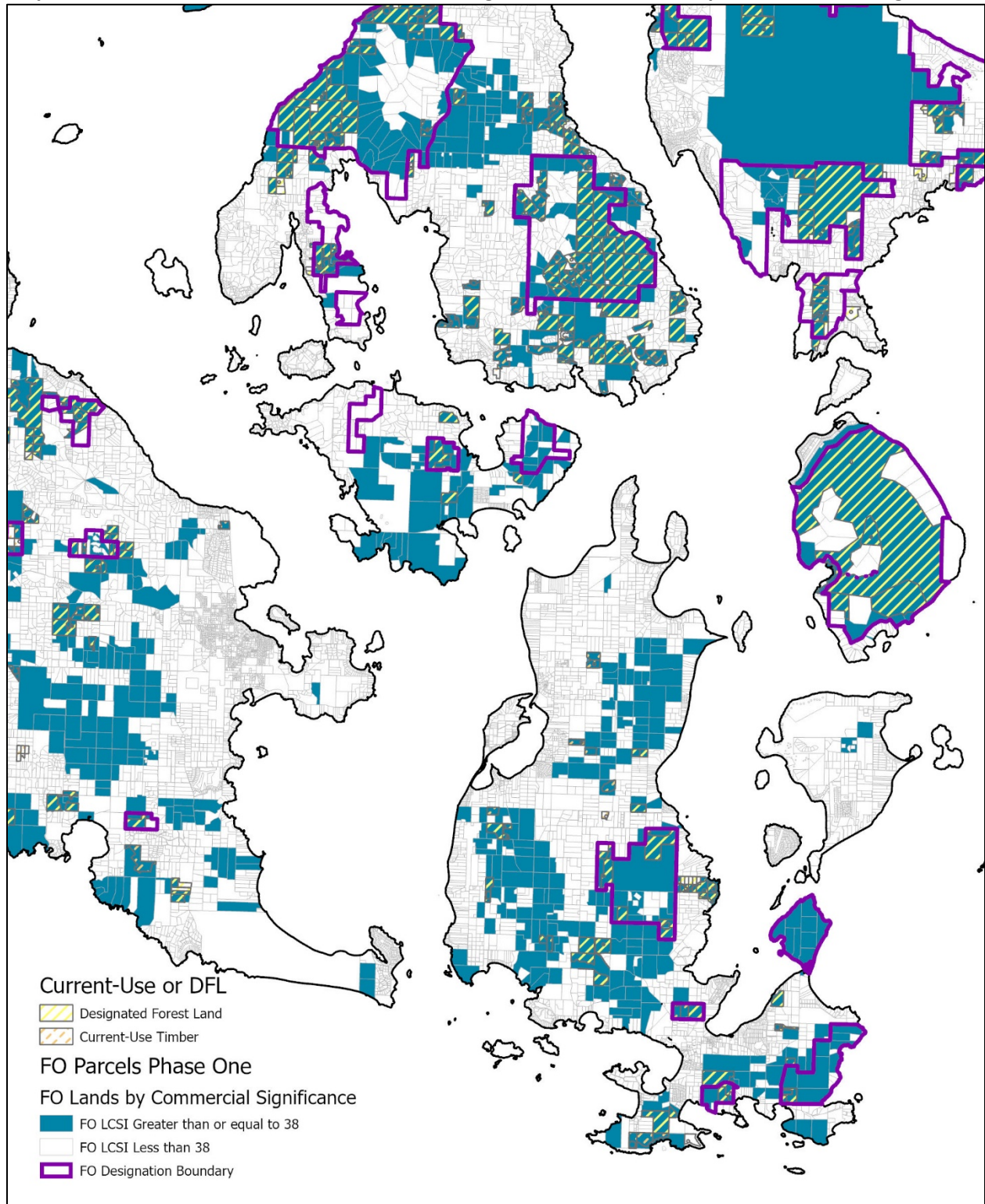
Map 12. AG LCSI on Parcels in Current-Use Tax Program or on the Voluntary Stewardship Plan Maps – Orcas and Surrounding Islands.



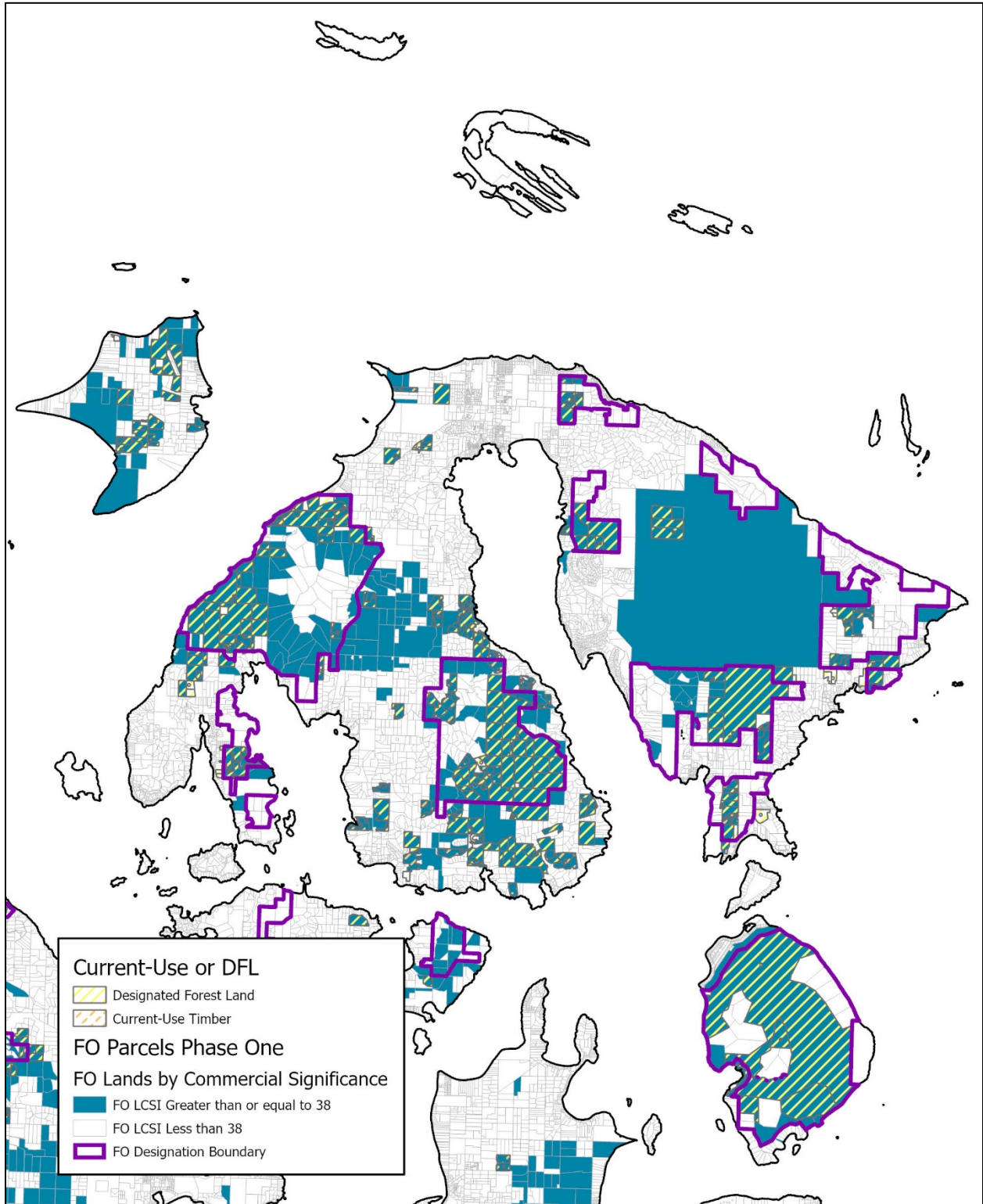
Map 13. FO LCSI on Parcel in Current-Use and Designated Forest Land – San Juan and Surrounding Islands.



Map 14. FO LCSI on Parcel in Current-Use and Designated Forest Land – Lopez and Surrounding Islands.



Map 15. FO LCSl on Parcel in Current-Use and Designated Forest Land – Orcas and Surrounding Islands.



Phase One Conclusion

The purpose of Phase One is to determine the degree to which lands throughout the County meet the GMA criteria for forest and agricultural long-term commercial significance. This countywide analysis will be expanded upon in Phase Two when parcels are analyzed for consistency with the *Plan* designation criteria. In general, the maps and data in Phase One demonstrate that the lands currently designated as agricultural and forest resource lands are commercially significant, are not characterized by urban growth, and are used or capable of being used for resource production. In summary, currently designated natural resource lands have the following characteristics:

- Designated Agricultural Resource (AG) land has a mean AG LCSl of 38.96. This indicates that the average designated AG parcel is commercially significant;
- Designated Forest Resource (FO) land has a mean FO LCSl of 34.19. This indicates that while many FO parcels are commercially significant, some of these parcels might not be commercially significant. To further illustrate this point, there are 766 parcels designated FO on the *Plan* Official Maps and 243 of these parcels have an FO LCSl above 38. An additional 246 parcels designated FO have an FO LCSl between 31 and 38, indicating they have an above average commercial significance. In total, 489 parcels designated FO have above average to exceptional commercial significance;
- Parcels that are designated AG and participate in agricultural tax programs have an average AG LCSl of 45.41. Parcels designated AG and shown on the Voluntary Stewardship Program's farm map have an average AG LCSl of 43.26, suggesting that designated AG parcels with existing agricultural operations have higher AG LCSl scores; and
- Parcels that are designated FO and participate in forestry tax programs have an average FO LCSl of 44.91, indicating that designated FO parcels with existing forestry operations are exceptionally commercially significant.

Phase Two Results

During Phase Two all parcels were analyzed for whether they meet the Comprehensive Plan (*Plan*) designation criteria. Phase Two had three steps:

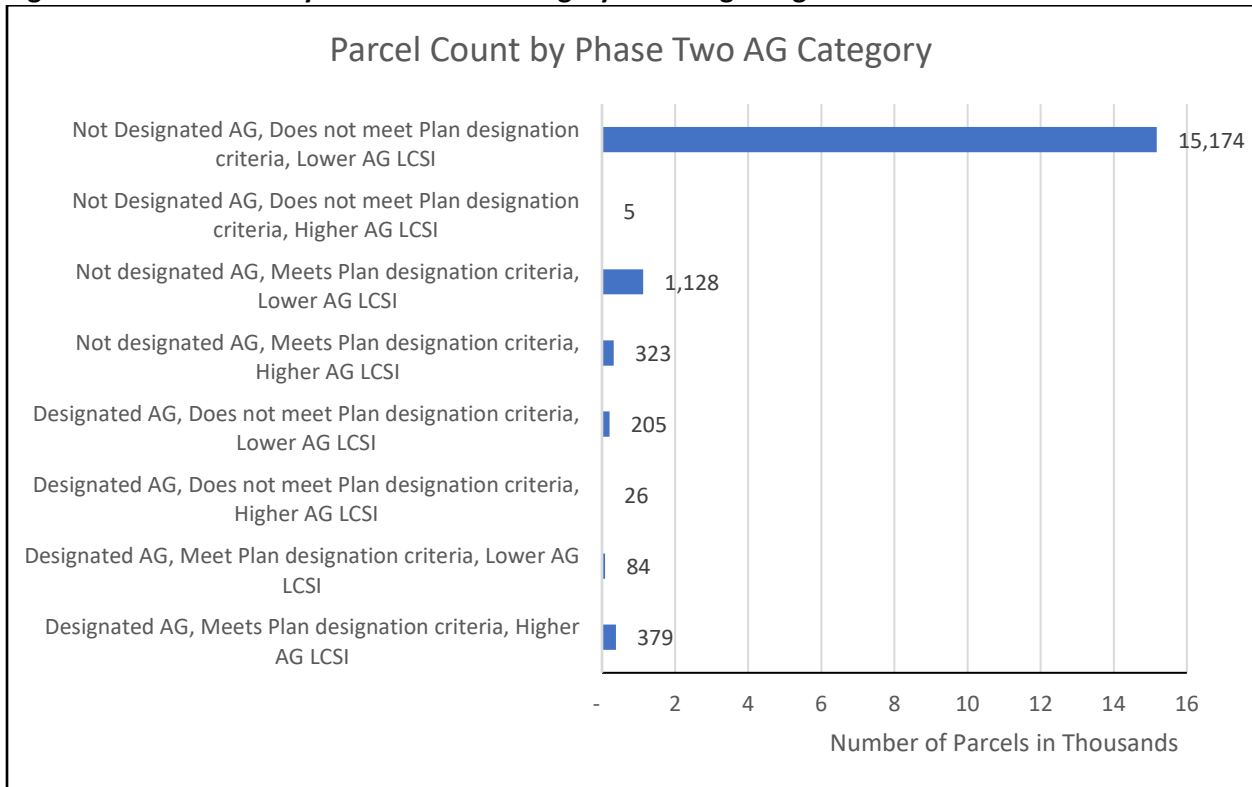
- **Step One:** divide Phase One results into lands that are and are not designated natural resource lands on the Official Maps;
- **Step Two:** review parcels for whether they meet the existing *Plan* criteria; and
- **Step Three:** review LCSl on lands that meet plan natural resource land designation criteria.

Phase Two AG Results

Figure 3 shows the count of parcels for each Phase Two category. All 17,324 parcels in the County were assigned a category. The majority of parcels are not designated Agricultural Resource, do not meet the *Plan* criteria and have a lower AG LCSl; meaning they are probably not agricultural resource lands. Of the remaining parcels, 379 are designated, meet the *Plan* criteria and have a higher AG LCSl; meaning the

Agricultural Resource land designation is probably correct. All the remaining parcels have more nuanced results where they satisfy some but not all the long-term commercial significance or *Plan* criteria.

Figure 3. Parcel Count by Phase Two AG Category – Existing Designation Criteria.



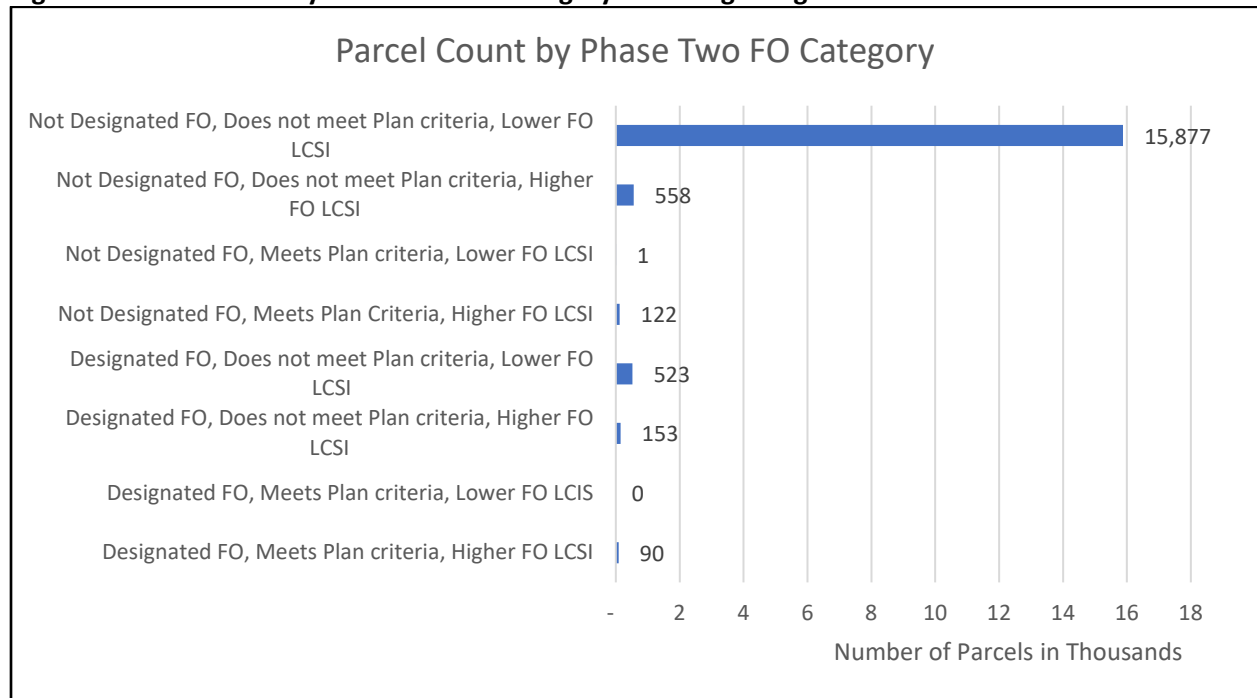
Source: SJC GIS.

There are 1,128 parcels that are not designated Agricultural Resource, meet the existing *Plan* criteria, and have a lower AG LCSI (AG LCSI below 38). This suggests that there are many parcels that meet the existing *Plan* criteria despite being less commercially significant. This is due, in part, to the *Plan* criteria being too general. The *Plan* designation criteria are discussed further in the next section of this report.

Phase Two FO Results

Figure 4 shows the count of parcels for each Phase Two category. All 17,324 parcels in the County were assigned a category. 15,872 parcels (91 percent) are not designated Forest Resource, do not meet the existing *Plan* criteria, and have a lower FO LCSI. This suggests that the majority of parcels in the County are not forest resource lands. Of the remaining parcels, 90 are designated, meet the *Plan* criteria and have a higher FO LCSI; meaning they are probably correctly designated Forest Resource land. All the remaining parcels have more nuanced results where they satisfy some but not all the long-term commercial significance or *Plan* criteria.

Figure 4. Parcel Count by Phase Two FO Category – Existing Designation Criteria.



Source: SJC GIS.

There are 558 parcels that are not designated Forest Resource, do not meet the existing *Plan* criteria, and have a Higher FO LCSl (FO LCSl above 38). There are another 153 parcels that are designated, do not meet the *Plan* criteria, and have a higher FO LCSl. This suggests that there are many parcels that do not meet the *Plan* criteria despite probably being commercially significant. This is due, in part, to the *Plan* criteria being too specific to include most commercially significant forest lands. The *Plan* designation criteria is discussed further in the next section of this report.

Proposed *Plan* Designation Criteria Policies

New agricultural and forest resource land designation criteria are proposed during the *Plan* update to categorize resource lands more accurately. The proposed changes make the agricultural resource land designation criteria more specific, ensuring that only lands that qualify as agricultural resource lands are designated. On the other hand, the proposed amendments to the forest resource land designation criteria will allow more commercially significant lands to qualify for the forest resource designation. During Phase Two, parcels were re-analyzed for whether they would meet the proposed designation criteria. The results of this analysis are provided below.

New Agricultural Resource Land Designation Criteria

Many parcels in the County meet the existing *Plan* agricultural resource land designation criteria though they may not be commercially significant. The *Plan* establishes two criteria for designation as agricultural resource in Policy 2.3.D.5.a.1. The designation criteria are not specific enough to narrow the field of parcels to those that are commercially significant for agricultural production. Under the existing *Plan* criteria, parcels must meet one of the following criteria to be designated agricultural resource land:

- Parcels are 10 acres or larger with prime farmland soils, or
- Parcels 10 acres or larger and that participate in the current-use and open space agricultural tax programs.

There are 2,408 parcels that are 10 acres or larger in the County. These parcels account for 76,927 or sixty-five percent of the approximately 112,637 acres in the County. Furthermore, most of the County has prime farmland soils. There are about 11,347 or sixty-five percent of parcels with some amount of prime farmland soils.

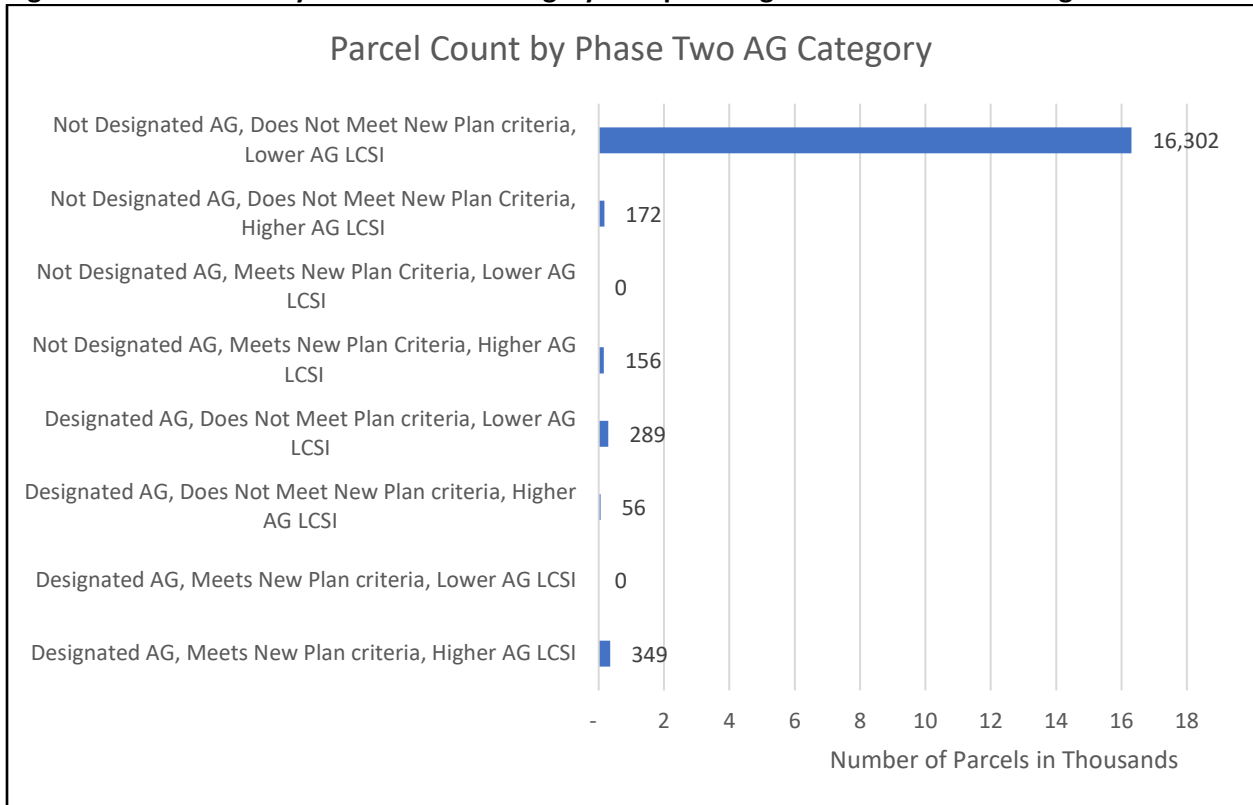
During Phase Two, 1,128 parcels were identified as not designated agricultural resource land, meeting the existing *Plan* criteria, and having a lower AG LCSl. Because the *Plan* designation criteria are too general, many parcels that are probably not commercially significant nonetheless meet the *Plan* designation criteria.

One of the primary purposes of the *Plan* designation criteria is to ensure that decisions on natural resource land designations are made consistently. If too many parcels meet the designation criteria, the reason behind designating one area and not designating another becomes more obscure. The AG designation criteria can be improved by making the thresholds for designation more specific to ensure that designation decisions are being made for clear and uniform reasons. Under the proposed amendments to the *Plan* agricultural resource land designation criteria, parcels the County deems commercially significant can be designated AG provided they meet one of the following:

- The land is enrolled in the current-use and open space tax program;
- The land is currently used, or has been used for agriculture;
- Areas with at least 200 contiguous acres of agricultural land developed at a density less than one dwelling unit per ten acres; or
- Adjacent lands are primarily in agricultural use.

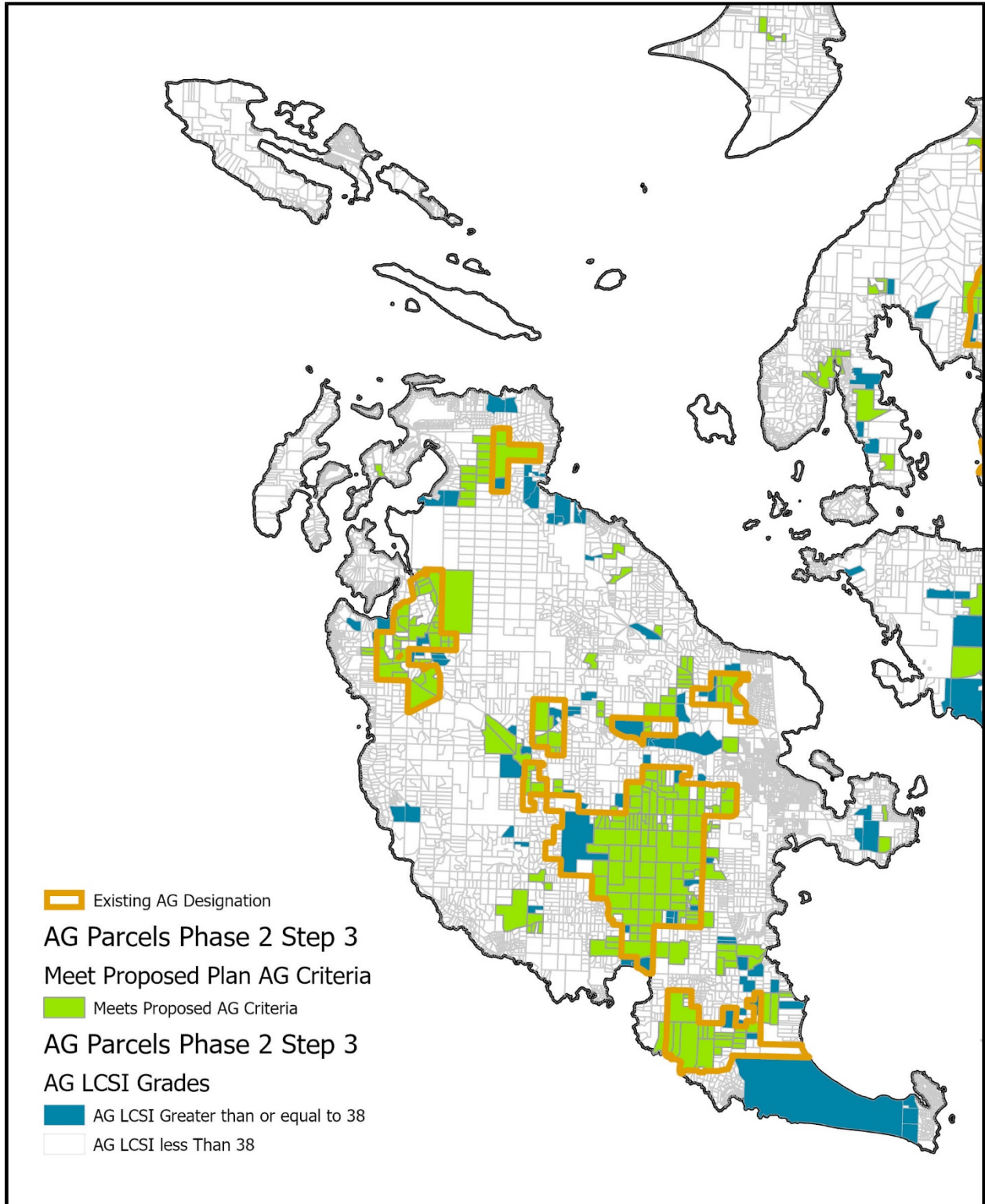
Parcels were re-analyzed based on the proposed designation criteria. Figure 5 shows the new parcel count by Phase Two category based on the proposed criteria. Of note, the number of parcels that meet the new *Plan* designation criteria but are not commercially significant has reduced to zero. This means that the proposed designation criteria do not qualify less commercially significant agricultural land for designation; improving on the existing criteria. When evaluating parcels for compliance with proposed amendments, staff did not analyze the third criterion listed above (contiguous acreage). This criterion must be considered on a case-by-case basis rather than in a countywide parcel search and will be included in the in-depth analysis in Phase Four.

Figure 5. Parcel Count by Phase Two AG Category – Proposed Agricultural Resource Designation Criteria.



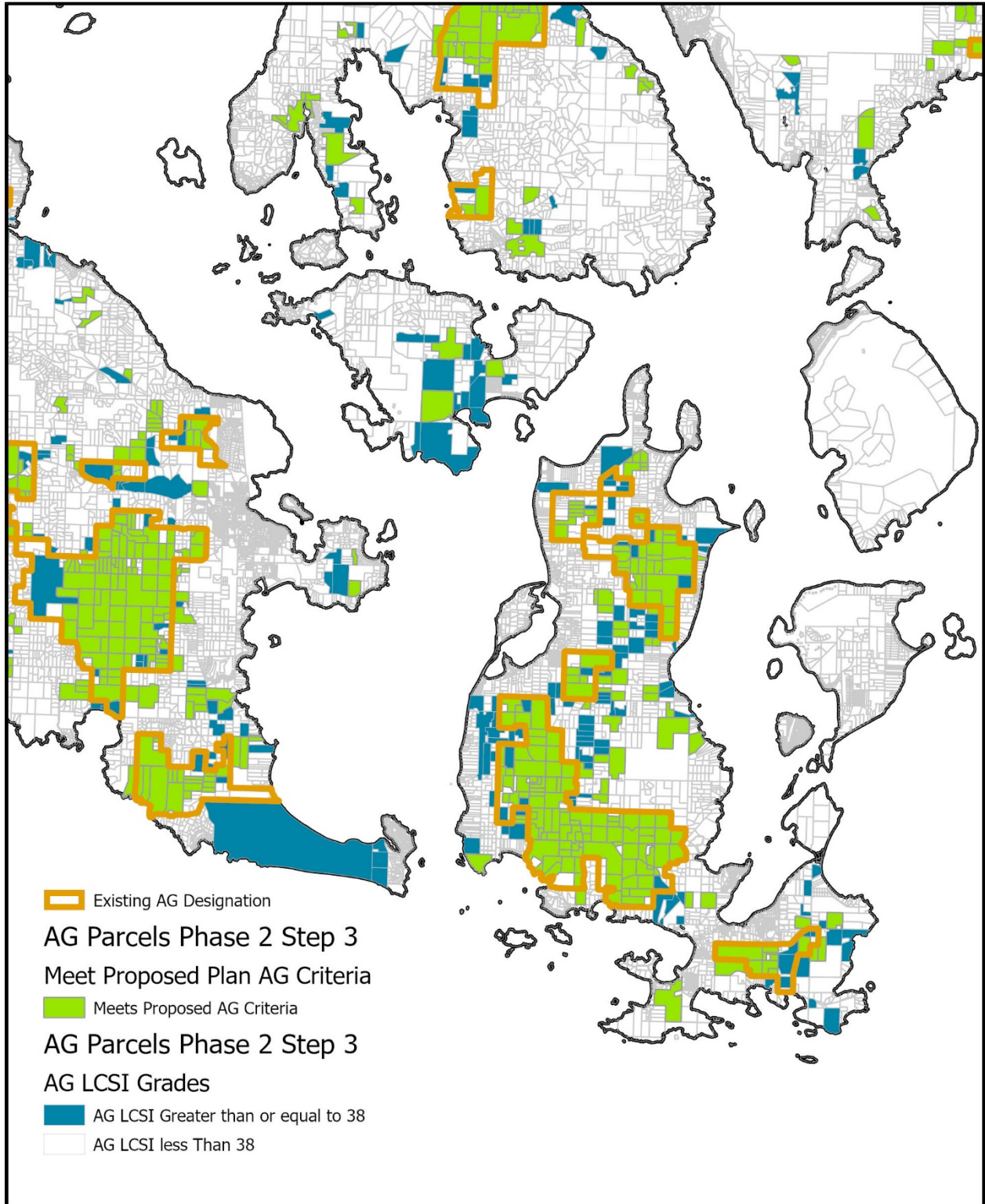
Maps 16 through 18 show parcels that meet the proposed new designation criteria, other commercially significant agricultural lands, and the boundaries of the existing agricultural resource land designation.

Map 16. Commercially Significant Agricultural Lands and Parcels Meeting the Proposed Designation Criteria, San Juan and Surrounding Islands.



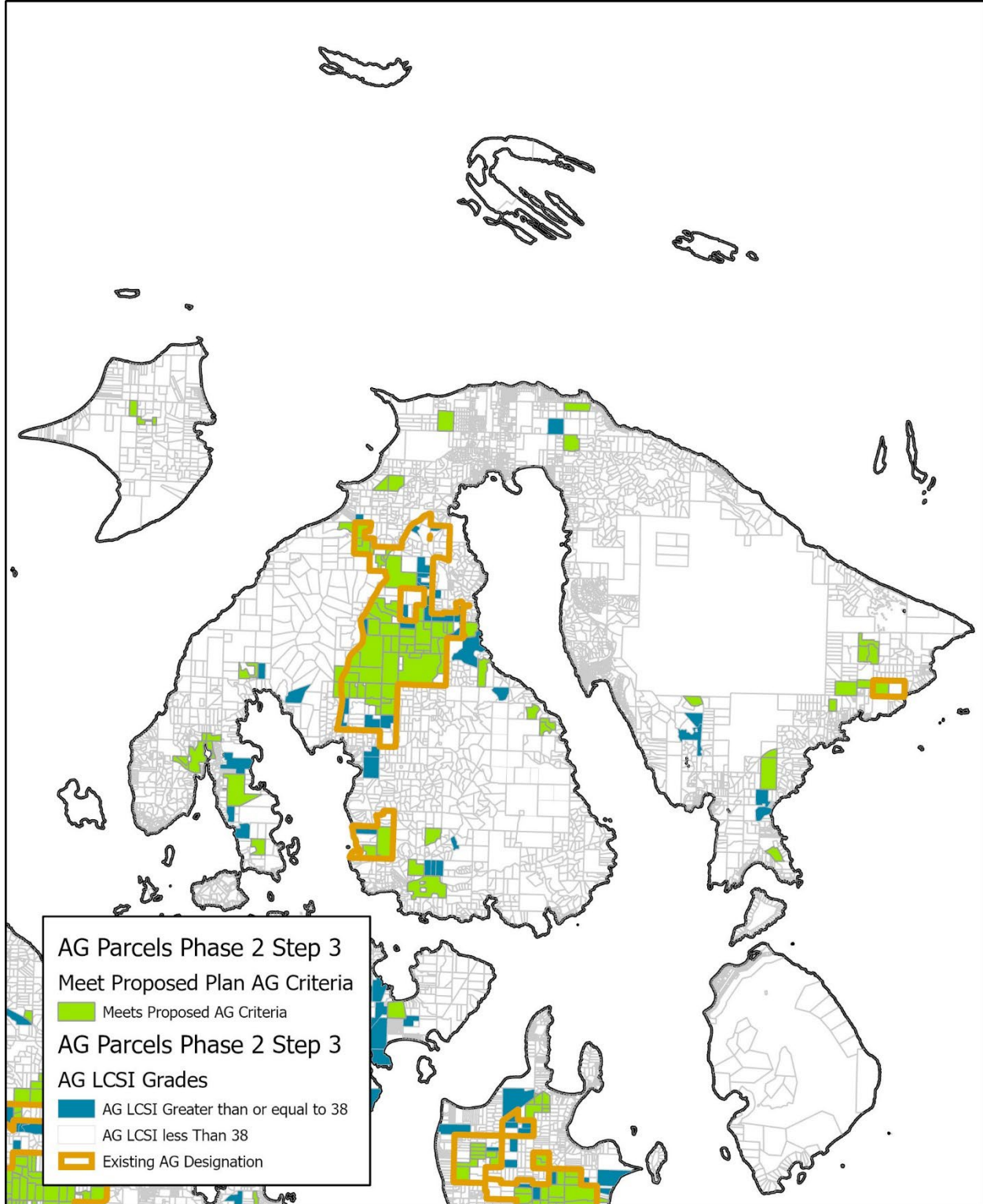
Source: SJC GIS.

Map 17. Commercially Significant Agricultural Lands and Parcels Meeting the Proposed Designation Criteria, Lopez and Surrounding Islands.



Source: SJC GIS.

Map 18. Commercially Significant Agricultural Lands and Parcels Meeting the Proposed Designation Criteria, Orcas and Surrounding Islands.



Source: SJC GIS.

FO Designation Criteria

The forest resource land designation criteria present the opposite problem from the AG designation criteria discussed above. Many parcels in the County do not meet the *Plan's* forest resource land designation criteria though they might be commercially significant. The *Plan* establishes four criteria for designation as forest resource in Policy 2.3.D.5.b.1. The designation criteria are too specific and might exclude from designation lands that are commercially significant for forestry. Under the existing *Plan* criteria, parcels must meet all four of the following criteria to be designated forest resource land:

- Lands in grades 1-5 on the State's Private Forest Land Grades map;
- Parcels are twenty acres or larger;
- Parcels participate in the Designated Forest Land or Open Space Timber tax programs; and
- Lands are being managed for the long-term production of forest products.

There are only 213 or about 1.23 percent of parcels in the County that meet all four of the designation criteria. During Phase Two, 558 parcels were identified as not designated forest resource land, meeting the *Plan* criteria, and having a higher FO LCS. It appears that some commercially significant forest lands do not meet the *Plan* criteria. Natural resource land designations ought to preserve lands with long-term commercial significance from conversion to incompatible uses. If the designation criteria are too specific, they run the risk of excluding lands that have more long-term commercial significance. This appears to be the case with the Forest Resource designation criteria based on review of the results from Phase Two.

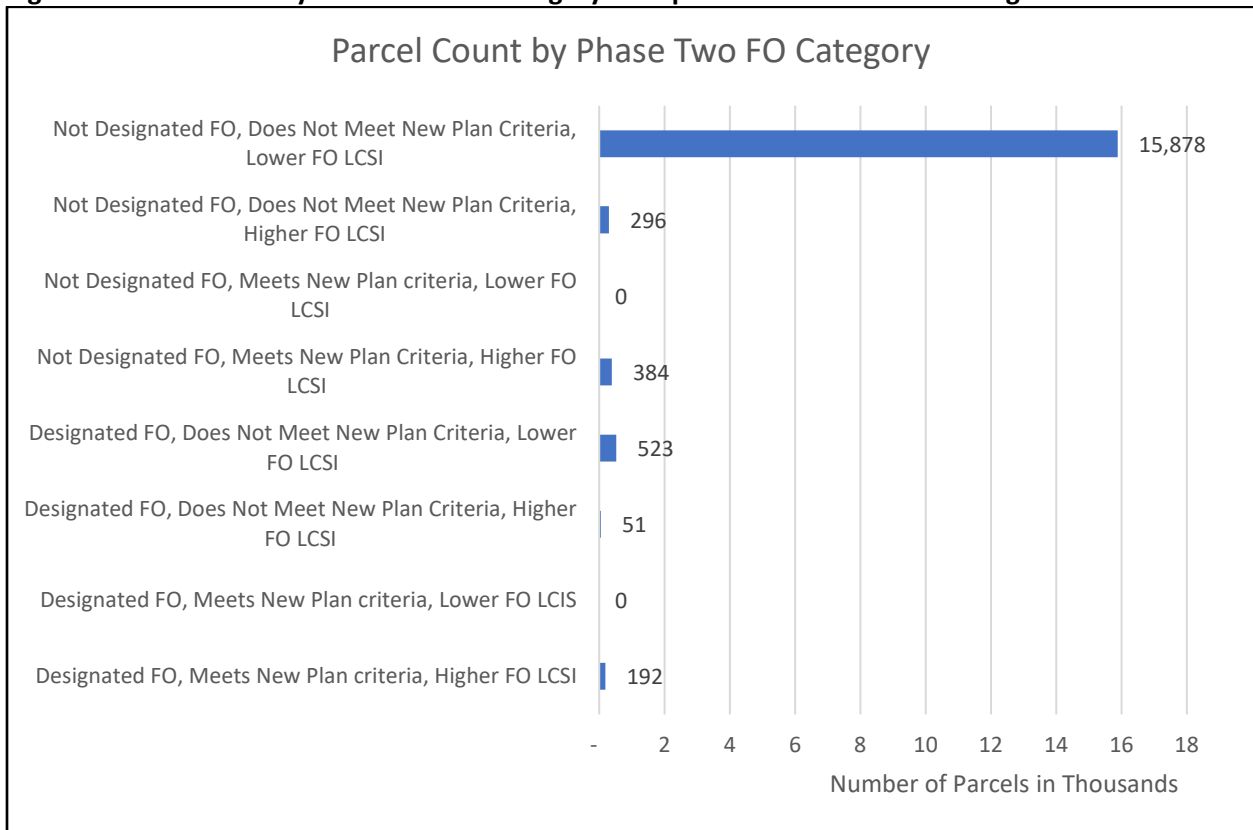
Amendments to the forest resource designation criteria are proposed during the *Plan* update. Under the proposed amendments to the *Plan* forest resource land designation criteria, parcels the County deems commercially significant can be designated forest resource provided they meet one of the following:

- Lands participating in the designation forest land, current-use timber land, or open space-timber tax programs;
- State trust lands under forest management;
- Lands managed for the long-term production of forest products with few non-forest related uses; or
- Areas with at least 100 contiguous acres of forest land developed at a density less than one dwelling unit per fifteen acres.

Parcels were re-analyzed based on the proposed designation criteria. Figure 6 shows the new parcel count by Phase Two category based on the amended criteria.

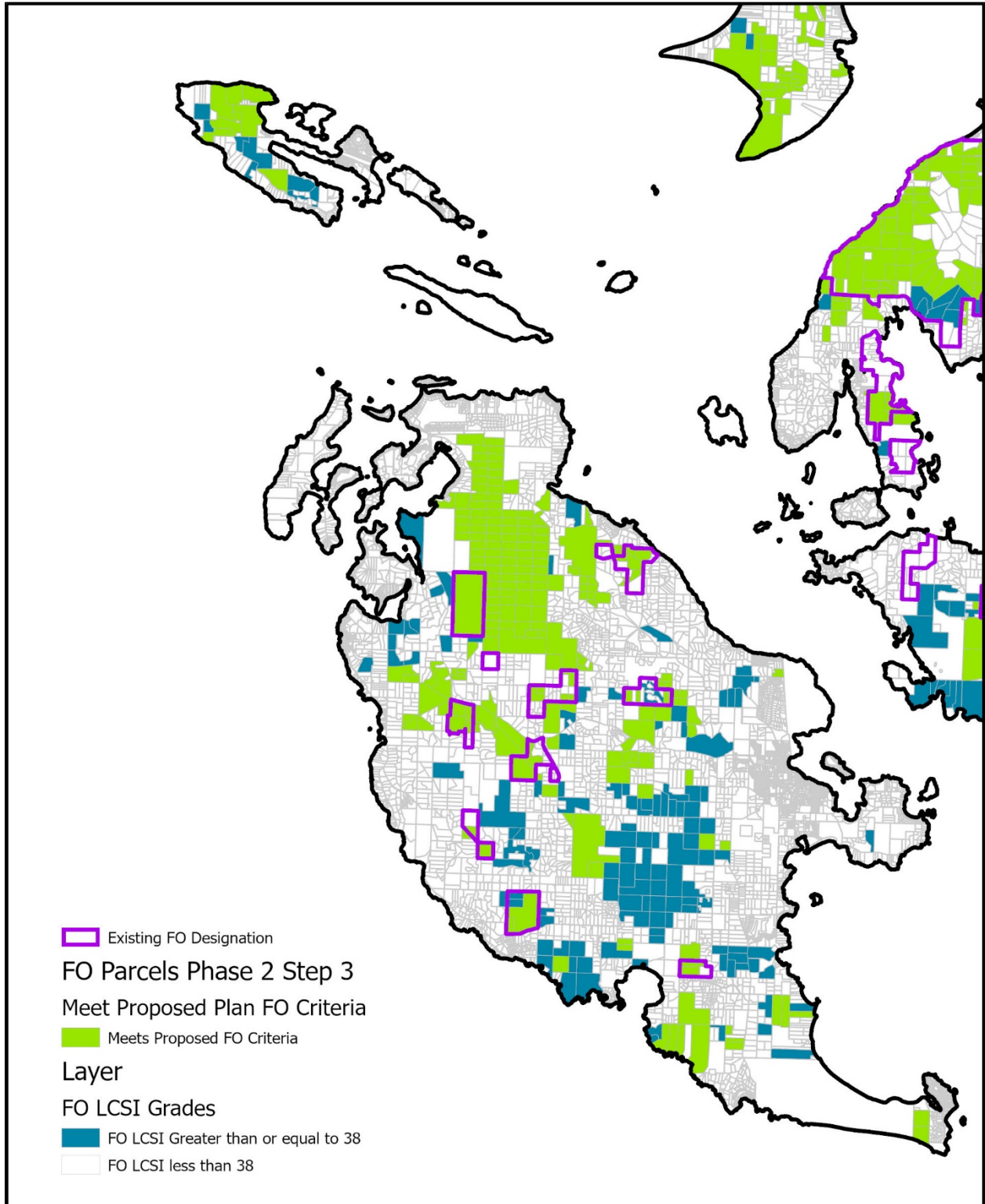
Of note, the number of designated forest resource parcels that do not meet the new *Plan* designation criteria and are commercially significant has reduced from 152 to fifty-one. This means that the proposed designation criteria now include more commercially significant forestland for designation; improving on the existing criteria. When evaluating parcels for compliance with proposed amendments, staff did not analyze the third criterion listed above (contiguous acreage). This criterion must be considered on a case-by-case basis rather than in a countywide parcel search and will be included in the in-depth analysis during Phase Four.

Figure 6. Parcel Count by Phase Two FO Category – Proposed Forest Resource Designation Criteria.



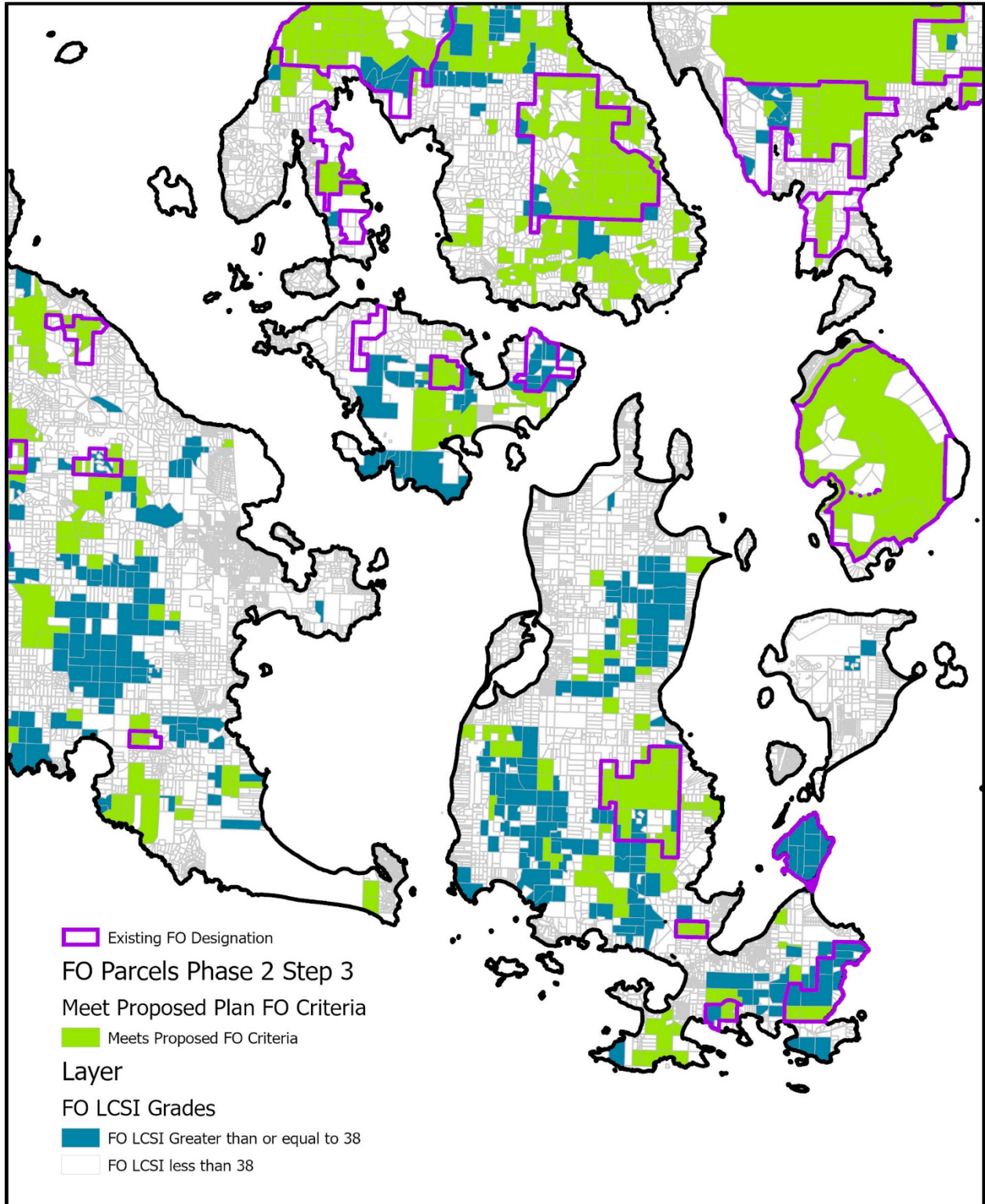
Maps 19 through 21 show parcels that meet the proposed new designation criteria, other commercially significant forest lands, and the boundaries of the existing forest resource land designation.

Map 19. Commercially Significant Forest Lands and Parcels Meeting the Proposed Designation Criteria, San Juan and Surrounding Islands.



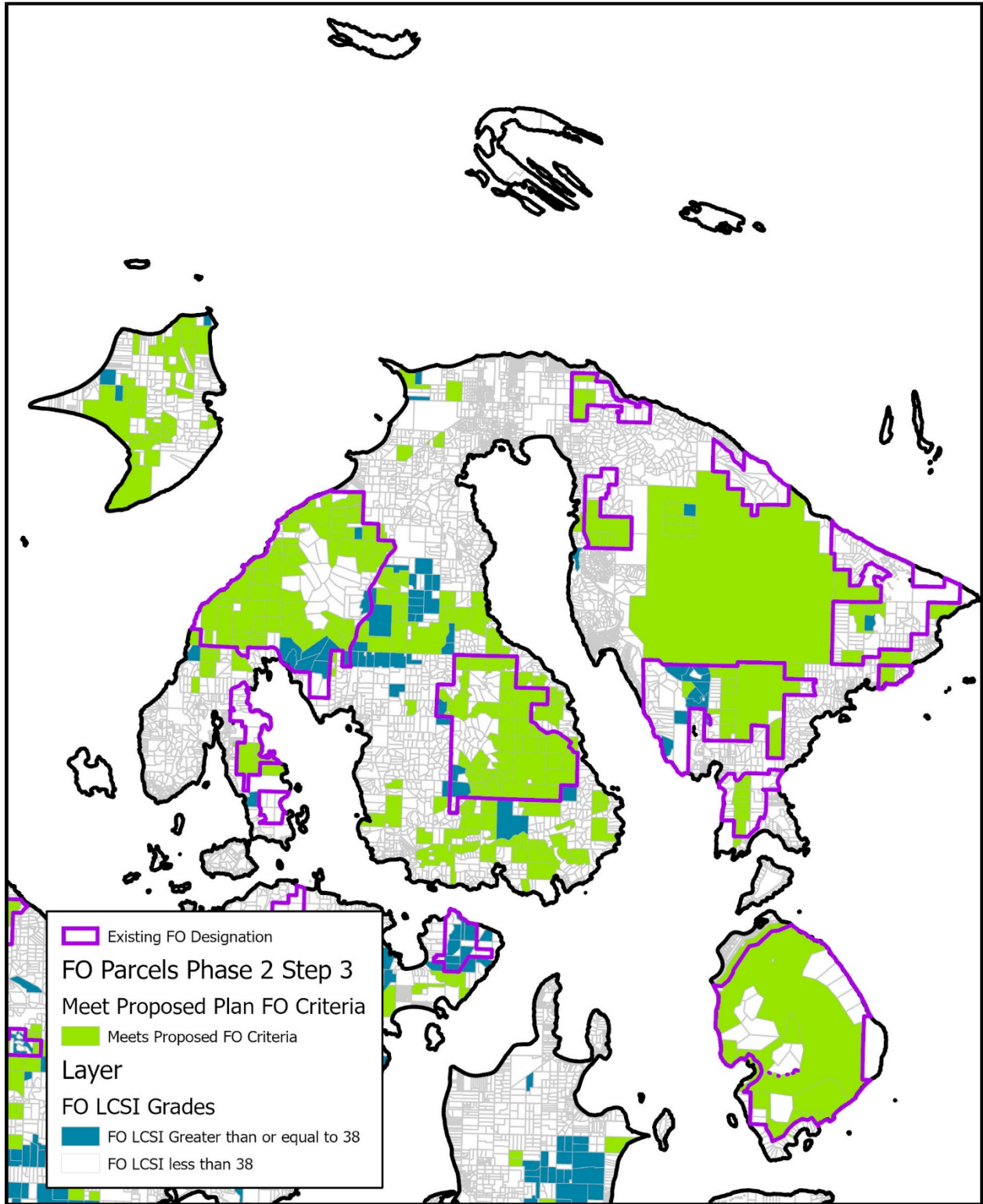
Source: SJC GIS.

Map 20. Commercially Significant Forest Lands and Parcels Meeting the Proposed Designation Criteria, Lopez and Surrounding Islands.



Source: SJC GIS.

Map 21. Commercially Significant Forest Lands and Parcels Meeting the Proposed Designation Criteria, Orcas and Surrounding Islands.



Source: SJC GIS.

Phase Two Conclusion

The purpose of Phase Two is to determine whether parcels meet the *Plan* designation criteria. This phase provides a major component of the answer to the central question of this report: whether the existing natural resource land designations are consistent with the *Plan*. In general, the maps and data in Phase Two demonstrate that the lands currently designated as natural resource lands are consistent with the *Plan* goals and policies. The Phase Two results are summarized as follows:

- The majority of parcels designated AG meet the *Plan* designation criteria. This is true with both the existing and proposed designation criteria;
- As discussed earlier in this report, most parcels, whether designated or not, do not meet the existing FO designation criteria. Most of the land designated FO meets the proposed designation criteria, but there are some areas that do not meet the *Plan* designation criteria, as discussed in the next section of this report; and
- In general, the natural resource land designations on the Official Maps are consistent with the goals and policies in the *Plan*. Areas that might need to be re-designated can be considered during Phase Three and given in-depth site-specific analysis using this countywide data during Phase Four.

Phase Three

The primary purpose of the Natural Resource Land Designation Review is to confirm that the natural resource land designations on the *Plan* Official Maps meet the *Plan* and GMA designation criteria. The purpose of this review is provided in WAC 365-196-480(2)(e), which states:

(e) The review of existing designations should be done on an area-wide basis, and in most cases, be limited to the question of consistency with the comprehensive plan, rather than revisiting the entire prior designation and regulation process. However, to the extent that new information is available or errors have been discovered, the review process should take this information into account. Review for consistency in this context should include whether the planned use of lands adjacent to agricultural, forest, or mineral resource lands will interfere with the continued use, in an accustomed manner and in accordance with the best management practices, of the designated lands for the production of food, agricultural products, or timber, or for the extraction of minerals.

During Phase Three, the Planning Commission and County Council will consider whether the natural resource land designations are consistent with the *Plan* goals and policies. The analysis detailed in this report comprises the first two phases of a process to guide that consideration.

After reviewing the results of this countywide review, staff has found, in general, the first two phases of the analysis confirm the designations are consistent with the proposed Comprehensive Plan goals and policies. No other changes to natural resource land designations are recommended beyond those contemplated in the submitted land use review requests discussed below.

Given the conclusion that this analysis generally confirms the existing natural resource land designations, discussion of changes to natural resource land designations will be limited to considering the land use review requests received during the *Plan* update.

Land Use Review Requests Submitted by Property Owners

The focus of the Phase Three discussion, including public input, will be directed at reviewing the requests for natural resource land designation changes that have been submitted by property owners throughout the *Plan* update process. The GMA provides specific thresholds for making natural resource land designation changes in WAC 365-190-040(10), which states:

(10) Designation amendment process.

(a) Land use planning is a dynamic process. Designation procedures should provide a rational and predictable basis for accommodating change.

(b) Reviewing natural resource lands designation. In classifying and designating natural resource lands, counties must approach the effort as a county-wide or regional process. Counties and cities should not review natural resource lands designations solely on a parcel-by-parcel process. Designation amendments should be based on consistency with one or more of the following criteria:

(i) A change in circumstances pertaining to the comprehensive plan or public policy related to designation criteria in WAC 365-190-050(3), 365-190-060(2), and 365-190-070(3);

(ii) A change in circumstances to the subject property, which is beyond the control of the landowner and is related to designation criteria in WAC 365-190-050(3), 365-190-060(2), and 365-190-070(3);

(iii) An error in designation or failure to designate;

(iv) New information on natural resource land or critical area status related to the designation criteria in WAC 365-190-050(3), 365-190-060(2), and 365-190-070(3); or

(v) A change in population growth rates, or consumption rates, especially of mineral resources.

The land use review requests submitted by property owners will be analyzed based on these and other criteria from the GMA and the Comprehensive Plan policies. The analysis is provided in the next section of this report. That section will be laid out as follows:

- The 2019 aerial photograph of the parcel;
- The Comprehensive Plan Official Map land use designation for the parcel and neighboring areas;
- A table with a summary of the request that includes a link to the request form submitted by the property owner;
- Staff analysis; and
- Staff recommendation.

Map 22. Request 18-0017.

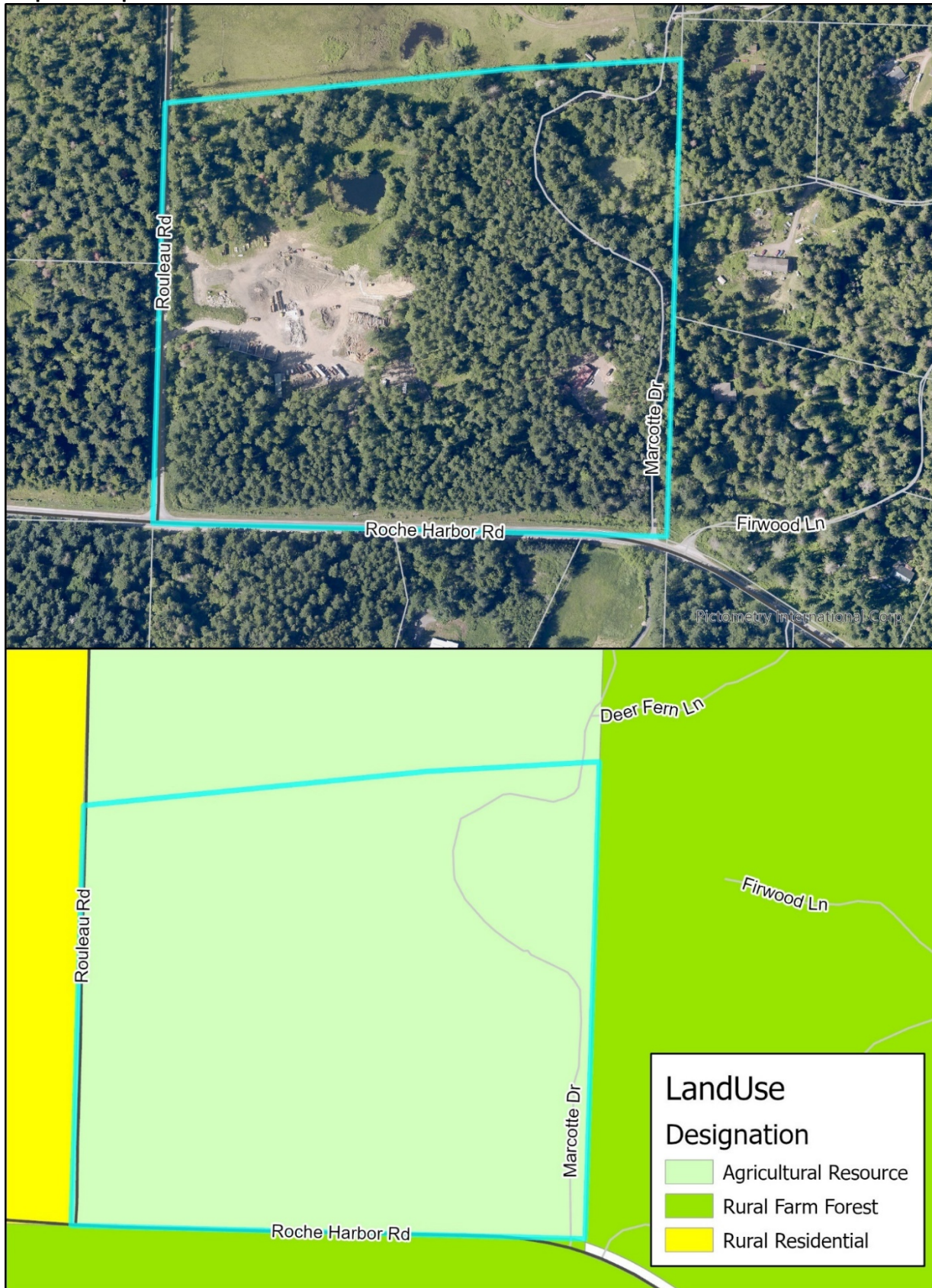


Table 3. Request 18-0017 Summary.

Request Number	Island	TPN	Address	Applicant Name
18-0017	San Juan	361931001000	45 Marcotte Dr	Francine Shaw (Agent for Mark McCutcheon)

Summary of Request

De-designate TPN 361931001000, a 34.76-acre parcel, from Agricultural Resource (AG) and designate Rural General Use (RGU).

The parcel is currently used as an unpermitted construction yard, and developed with a single-family home. The use of the parcel as a construction yard is subject to ongoing code enforcement action because a construction yard is not an allowed use in the Agricultural Resource Designation. Based on air photos, the construction yard was established between 2016 and 2019. The single-family home was constructed in 2019. The purpose of the proposal is to allow a wider range of commercial or industrial uses on the property. The applicant did not propose specific uses in the application.

Surrounding Land Uses and Designations

- North: Agricultural, AG
- South: Residential, Rural Farm Forest (RFF)
- East: Residential, RFF
- West: Undeveloped, Rural Residential (RR)

Link to Request: <https://www.sanjuanco.com/DocumentCenter/View/14903>

Analysis

This parcel is commercially significant agricultural resource land. More than 75 percent of the parcel is covered by prime farmland soils as mapped by the NRCS, meeting long-term commercial significance criterion in WAC 365-190-050(3)(c)(i). The parcel is adjacent to Rouleau and Roche Harbor Roads, both public roads. Being adjacent to these roads, the parcel has available public facilities used in transporting agricultural products, meeting the long-term commercial significance criterion in WAC 365-196-050(3)(c)(ii). The parcel is outside of both water system and sewer service areas that would facilitate more-intense use of the land; meeting WAC 365-190-050(3)(c)(iii). The parcel is several miles from an urban growth area and the use of the land for agriculture is not likely to conflict with more-intense urban development, meeting the criteria in WAC 365-196-050(3)(c)(v). The parcel is larger than 20 acres, fitting with the predominant parcel size of other commercially significant agricultural land in the County. The parcel size of TPN 361931001000 is consistent with WAC 365-196-050(3)(c)(vi). Land use settlement patterns near the parcel will not interfere with the use of this parcel for agriculture. The average surrounding parcel size is 20 acres or larger and the neighboring uses are either natural resource uses, undeveloped land, or rural residential development. These aspects of the surrounding development patterns and established land use patterns meet the criteria in both WAC 365-196-050(3)(c)(vii) and (viii). The parcel is proximate to markets. It is located on a ferry served island and adjacent to Roche Harbor

Road, a minor collector road. The combination of County road and ferry service allow for agricultural goods to get to market, consistent with WAC 365-190-050(3)(c)(xi).

This parcel is not characterized by urban growth. It is several miles from the nearest UGA (Friday Harbor).

The land on this parcel is capable of being used for agricultural production given the aspects of long-term commercial significance on this parcel discussed above and that adjacent parcels are currently used for agricultural production. The parcel has two primary types of soil categorized by the NRCS. The first, covering the southern area of the parcel is Whidbey gravelly loam, 3 to 15 percent slopes. This soil has a land capability class of 4s. This means that the soil has limitations that restrict the choice of plant or that require very careful management, or both. The subclass 's' indicates that the soil is limited because it is shallow, droughty, or stony. The northern portion of the parcel has Coupeville loam soil, 0 to 5 percent slopes with a land capability class of 6w. This soil class indicates that this parcel has limitations that would restrict the use to mainly grazing. The subclass 'w' shows that water in or on the soil interferes with plant growth or cultivation and that this farmland would need to be drained. Whidbey gravelly loam soil is classified as prime farmland if irrigated. Coupeville loam soil is classified as prime farmland if drained. Though these soils have characteristics that would present some challenges for agricultural production, the NRCS categorizes both as prime farmland soils in the *NRCS Soil Survey Report*.

The intent of the landowner to use the land for agriculture is not a determining factor in whether the land is capable of being used for agricultural production. WAC 365-190-050(3)(b)(i) states:

Lands that are currently used for agricultural production and lands that are capable of such use must be evaluated for designation. The intent of a landowner to use land for agriculture or to cease such use is not the controlling factor in determining if land is used or capable of being used for agricultural production. Land enrolled in federal conservation reserve programs is recommended for designation based on previous agricultural use, management requirements, and potential for reuse as agricultural land.

This parcel meets the existing and proposed designation criteria for agricultural resource land in the Comprehensive Plan. Under the existing *Plan* designation criteria, this parcel meets the requirements because it is larger than ten acres and has soils that are identified as those suitable for farming by the NRCS. The parcel meets the proposed AG designation criteria because it is in an Area with at least 200 contiguous acres of agricultural land developed at a density less than one dwelling unit per ten acres. The parcels adjacent to the north of the subject parcel are currently used for agricultural uses.

The parcel does not meet the RGU designation criteria. Specifically, the parcel does not meet *Plan* designation criterion 2.3.C.10.a.1.ii, which requires that the soils in areas designated RGU be marginal or unsuitable for intensive commercial agriculture or forestry uses. The Natural Resources Conservation Service (NRCS) soil maps for this area show that it has soils suitable for agriculture. The WA Department of Natural Resources (WDNR) private forest land grades (PFLG) map shows this area has soils conducive to forestry.

Staff Recommendation

Do not de-designate this property. It meets the designation criteria for the AG designation and does not meet the criteria for amending a natural resource land designation established in WAC 365-190-040(10).

Map 23. Request 18-0019.

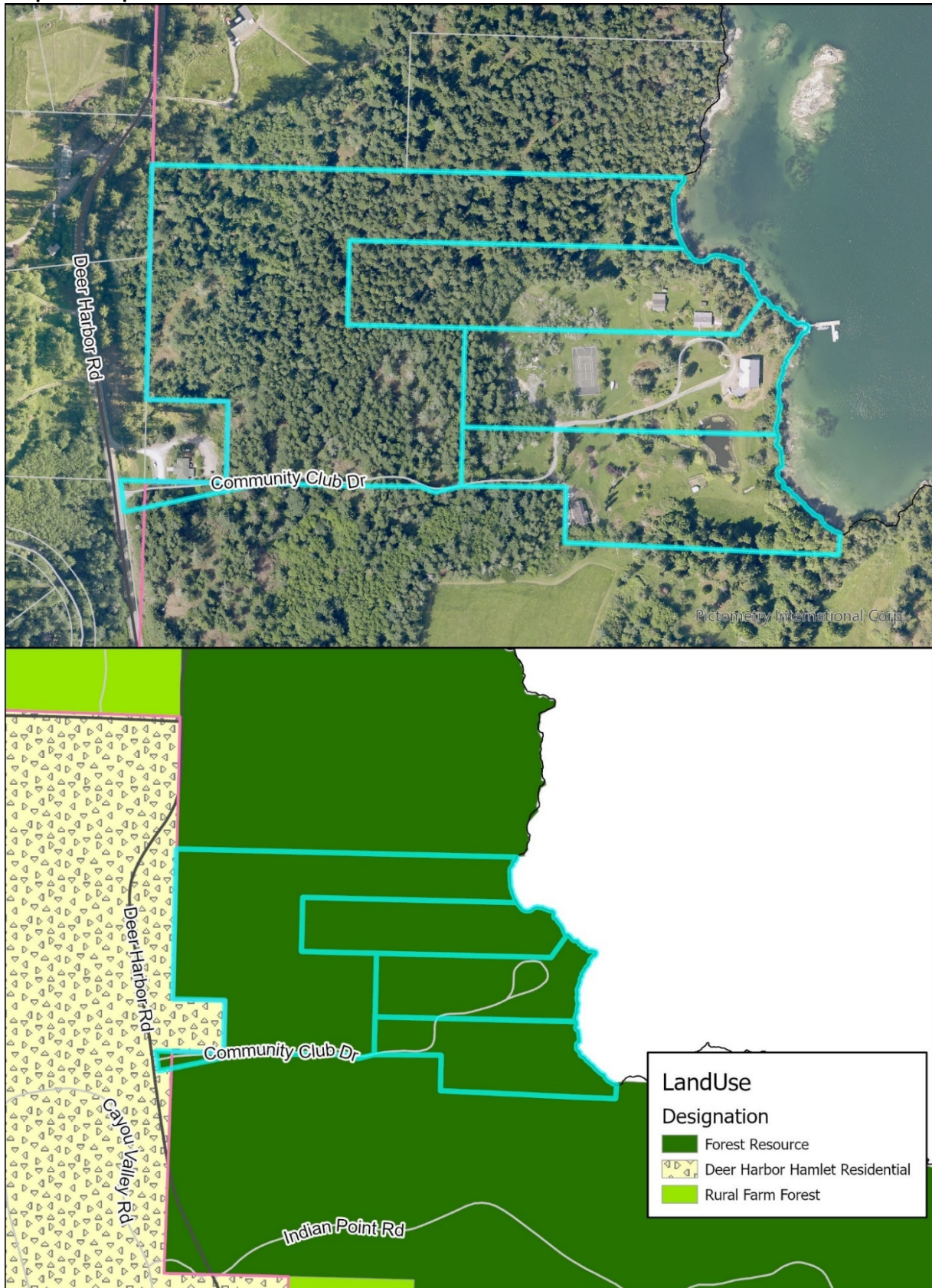


Table 4. Request 18-0019 Summary.

Request Number	Island	TPN	Address	Applicant Name
18-0019	Orcas	261711002000 260643002000 260643009000 260643008000	Community Club Drive	Stephanie O'Day (Agent for Bret and Kathryn Thurman)

Summary of Request

De-designate four parcels (30 acres) Forestry Resources (FOR) (1 du/20 acres) and change them to Rural Farm Forest (RFF) (1 du/5 acres) after considering a countywide review of the resource land designations.

Portions of all four parcels are also in the shoreline jurisdiction, designated (shoreline) RFF.

The parcels are either undeveloped or developed with residential uses. This area is located east of Deer Harbor Hamlet on the west side of Orcas Island. The aerial indicates that the larger, fifteen-acre parcel, TPN 260643008000, is largely forested. It is undeveloped. TPN 260643009000 is approximately 30 percent forested and the remaining parcels (TPNs 260643002000 and 260711002000) have little remaining forest.

The County re-designated these parcels to RFF with Ordinance 20-2015. The re-designation was appealed to the Growth Management Hearings Board (GMHB). The GMHB found Ordinance 20-2015 was noncompliant with GMA because the removal of the FOR designation was not part of an area-wide review of resource land designations. In a remand, the County had to reinstate the FOR designation on these parcels. See also GMHB case 16-2-0001 at <http://www.gmhb.wa.gov/search/case>.

Surrounding Land Uses and Designations

- North: Residential, FOR and Conservancy (C) shoreline
- South: Residential, FOR and C shoreline
- East: Water Body
- West: Undeveloped, Deer Harbor Hamlet Residential

Link to Request: <https://www.sanjuanco.com/DocumentCenter/View/18147/>

Analysis

These parcels are not commercially significant for the production of forest products. They are within a quarter mile of the Deer Harbor Hamlet, a rural settlement. WAC 365-190-060(4)(b) states, “[...] Forest lands of long-term commercial significance are located outside the urban and suburban areas and rural settlements.” Though these parcels are outside a rural settlement, their proximity to the Hamlet increases the possibility of conflicts with more intense rural land uses. Three of the four subject parcels are 5 acres each, the fourth is 15 acres. The parcels average 7.5 acres. WAC 365-190-060(4)(c) states, “Forest lands consist of predominantly large parcels”. The subject parcels are not large parcels.

The subject parcels are capable of being used to produce forest products. The GMA criteria in WAC 365-190-060(2)(b) require that the County evaluate whether lands that are capable of being used for forestry should be designated forest resource. Though these parcels have private forest land grades (PFLG) that suggest they are capable of producing forest products, they are not commercially significant because they are proximate to a rural settlement and the neighboring higher-intensity residential uses could be incompatible with the use of these smaller parcels for forestry uses. Furthermore, because these parcels are smaller in size, they are more likely to develop with rural residential uses rather than forest resource uses.

The subject parcels are not characterized by urban growth. The nearest UGA, Eastsound, is several miles away.

The subject parcels do not meet the existing or proposed *Plan* designation criteria for Forest Resource Land. These parcels are not enrolled in the DFL tax program, a requirement in the existing designation criteria. The parcels are not commercially significant, are not enrolled in a forestry-related tax program, are not state trust lands, are not being managed for the long-term production of forest products, are not part of an area with at least 100 contiguous acres of forest land, and are not necessary to provide a logical boundary for an area of forest resource land.

Staff Recommendation

De-designate these parcels. De-designation is justified because the countywide analysis of resource lands show these parcels are not commercially significant and do not meet the *Plan* designation criteria. The countywide analysis in this report comprises new information regarding the designation criteria in WAC 365-190-060(2). Based on this new information, de-designating these parcels meets the criteria of approval for natural resource land designation changes established in WAC 365-190-040(10)(b)(iv).

Map 24. Request 19-0004.

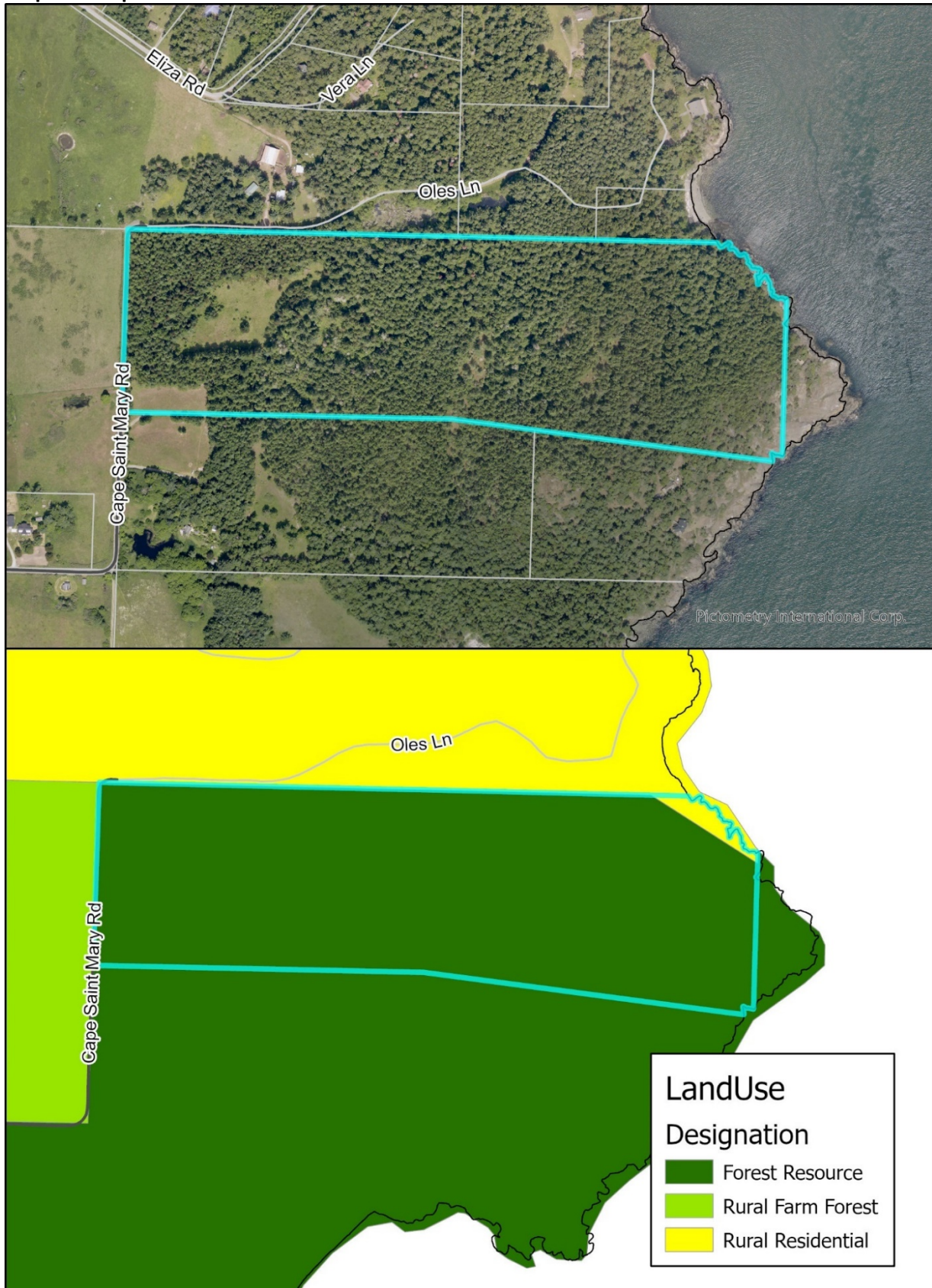


Table 5. Request 19-0004 Summary.

Request Number	Island	TPN	Address	Applicant Name
19-0004	Lopez	141611001000	Cape St Mary Rd	Tim McHarg (agent for Jean Michl Estate)

Summary of Request

De-designate TPN 141611001000, a 43.47-acre parcel, from Forest Resource (FOR) and change it to Rural Farm Forest (RFF).

This undeveloped, predominately forested parcel has split designations. A small portion of the northeast corner of the parcel, approximately 0.75 acre, is designated Rural Residential (RR). The remaining, forty-eight acres are designated FOR which has a 1 dwelling unit per 20 acres density. The northeast corner of the parcel is in shoreline with the RFF shoreline designation.

Properties to the South are designated FOR and those to the North are in the Rural Residential designation. These parcels are largely forested. The parcel to the West is designated RFF. It appears to have been cleared for agricultural use.

Surrounding Land Uses and Designations

- North: Residential, RR
- South: Residential, FOR
- East: Water Body
- West: Agriculture, RFF

Link to Request: <https://www.sanjuanco.com/DocumentCenter/View/18554>

Analysis

This parcel is commercially significant. The subject parcel is a forested 43-acre parcel and is not located near a rural settlement or other denser residential area, consistent with WAC 365-190-060(4)(b). The intensity of nearby development, being primarily rural residential and agricultural uses, is compatible with commercial forestry, consistent with WAC 365-190-060(4)(d). It is also graded PFLG 1, the highest land grade for production of forest products. The higher PFLG on this parcel is consistent with the long-term commercial significance criteria in WAC 365-190-060(2)(c).

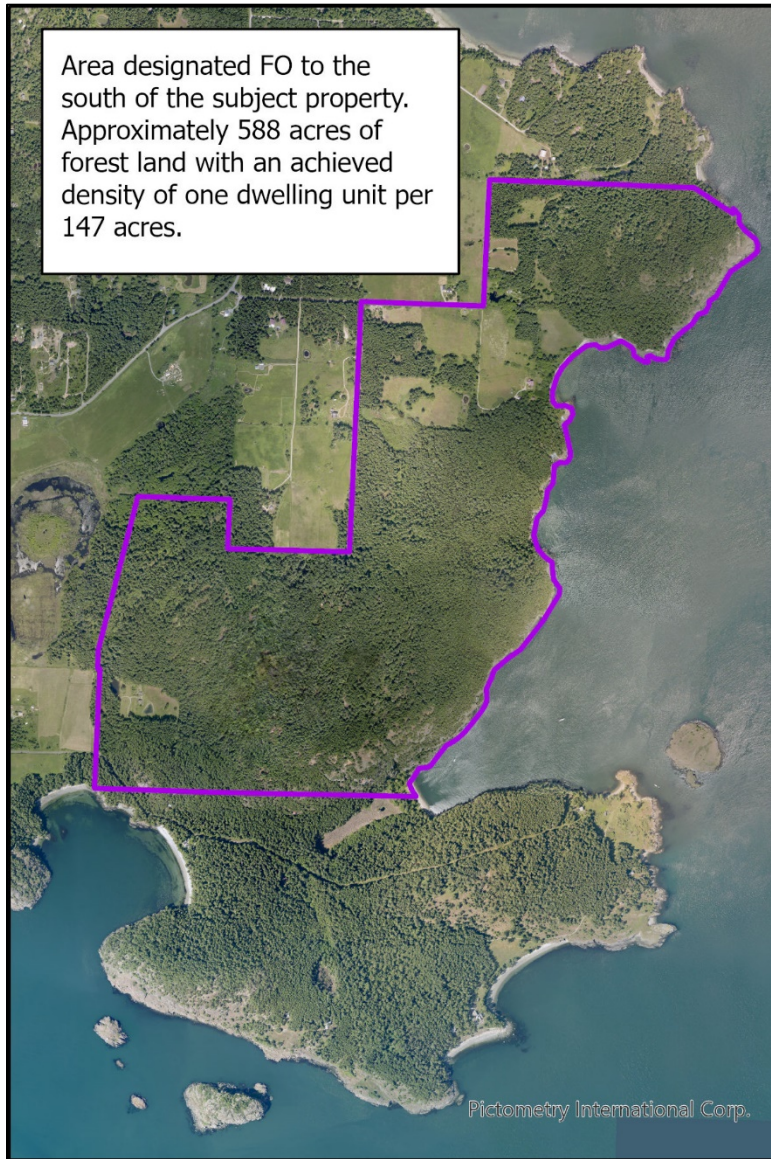
The parcel is not characterized by urban growth. The nearest UGA is more than six miles away from the subject parcels.

The parcel is capable of being used for producing forest products. The physical characteristics of this parcel make it capable of being used for forestry production. The parcel is larger than forty acres, is undeveloped, and covered with trees. The size of the forested parcel is consistent with WAC 365-190-060(4)(c), which states, "The size of the parcels: Forest lands consist of predominantly large parcels". Furthermore, the PFLG of 1 on this parcel indicates that it is an ideal location for productive forestry. The

surrounding land use intensity is primarily lower density rural residential development or agricultural uses that will not conflict with the use of the land for producing forestry products.

The parcel meets the proposed *Plan* designation criteria for Forest Resource land. It is part of 100 contiguous acres of forest land when considered with the other forest resource land designated in this area. There are fifteen parcels, including the subject parcel, designated forest resource land in the area. The area designated forest resource to the south of the subject parcel totals approximately 588 acres. There are roughly four existing residences within this area for an achieved density of one dwelling unit per 147 acres. This meets the proposed forest resource designation criteria. Figure 7 below shows an aerial photograph the subject property and the neighboring forest land.

Figure 7. Area Designated Forest Resource Near the Subject Parcel.



Source: SJC GIS.

Staff Recommendation

Do not de-designate this parcel. It meets both GMA and *Plan* natural resource land designation criteria. The new information provided through the countywide analysis does not support removing the forest resource land designation. There does not appear to be an error in designating. The designation of this parcel as forest resource is consistent with the designation criteria policy changes proposed during the *Plan* update. The circumstances beyond control of the property owner have not changed for this parcel. The parcel does not meet the criteria for natural resource land designation amendments established in WAC 365-190-040(10).

Map 25. Request 20-0002.



Table 6. Request 20-0002 Summary.

Request Number	Island	TPN	Address	Applicant Name
20-0002	Orcas	173533001000	493 Winter Falls Ln	Sherri Pierson

Summary of Request

De-designate TPN 173533001000 from Forest Resource (FOR) to Rural Farm Forest (RFF).

This five-acre parcel has a maximum density of 1 dwelling unit per 20 acres. The parcel is currently developed with a single-family residence but is heavily forested as are all surrounding properties. Moran State Park is to the West. The parcels to the South and East also have residential development.

There is no RFF designation abutting this property, surrounding designations are FOR and Conservancy.

Surrounding Land Uses and Designations

- North: Undeveloped, FOR
- South: Residential, FOR
- East: Residential, FOR
- West: Moran State Park, Conservancy

Link to Request: <https://www.sanjuanco.com/DocumentCenter/View/20039>

Analysis

The subject parcel is not commercially significant. It is served by a community water system, a service conducive to the conversion of forest land. The availability of services conducive to the conversion of forest land is one of the factors the County must consider per WAC 365-190-060(4)(a). The parcel is within one-half mile of the Doe Bay activity center, a rural settlement with more intense rural development. Proximity of the subject parcel to rural settlements is one of the factors WAC 365-190-060(4)(b) requires the County to consider when designating forest resource lands. The parcel is roughly five acres in size. WAC 365-190-060(4)(c) states, "Forest lands consist of predominantly large parcels". The subject parcel is not a large parcel. This parcel does not participate in a forestland tax program, a factor the County must consider per WAC 365-190-060(4)(e). These factors combine to make this parcel not commercially significant.

This parcel is not characterized by urban growth it is several miles away from Eastsound, the nearest UGA.

This parcel can produce forest products because it has a PFLG of 3. The physical characteristics of this parcel, specifically the small size, limit the commercial productivity as timber land. Though this parcel has a PFLG suggesting it could be productive forest land, the other characteristics of the parcel such as small parcel size, availability of services conducive to the conversion of forest land, the proximity to rural settlements, and not currently being used for forestry evidenced by not participating in the DFL tax program, all combine to make this parcel not commercially significant for forestry production.

The parcel does not meet either the existing or proposed *Plan* designation criteria. It is not enrolled in the Designated Forest Land (DFL) tax program; a requirement in the existing designation criteria. It is not commercially significant, failing the first criteria in the proposed designation policies. Because the parcel is not commercially significant, designation as forest resource land is inconsistent with the proposed *Plan* designation criteria.

Staff Recommendation

De-designate this parcel and the four other five-acre parcels to the south because they are all not commercially significant and do not meet the existing or proposed *Plan* Forest Resource land designation criteria. The analysis in this report comprises new information regarding the designation criteria in WAC 365-190-060(2). Furthermore, the small parcels in this area do not meet the proposed *Plan* designation criteria. This is a change in local designation policy during the *Plan* update and de-designation would be consistent with the criteria for natural resource land designation amendment established in WAC 365-190-040(10)(b)(i). Based on this new information and the parcel not meeting the proposed *Plan* designation criteria, de-designating these parcels meets the criteria of approval for natural resource land designation changes established in WAC 365-190-040(10)(b)(i) and (iv).

Map 26. Request 20-0004.

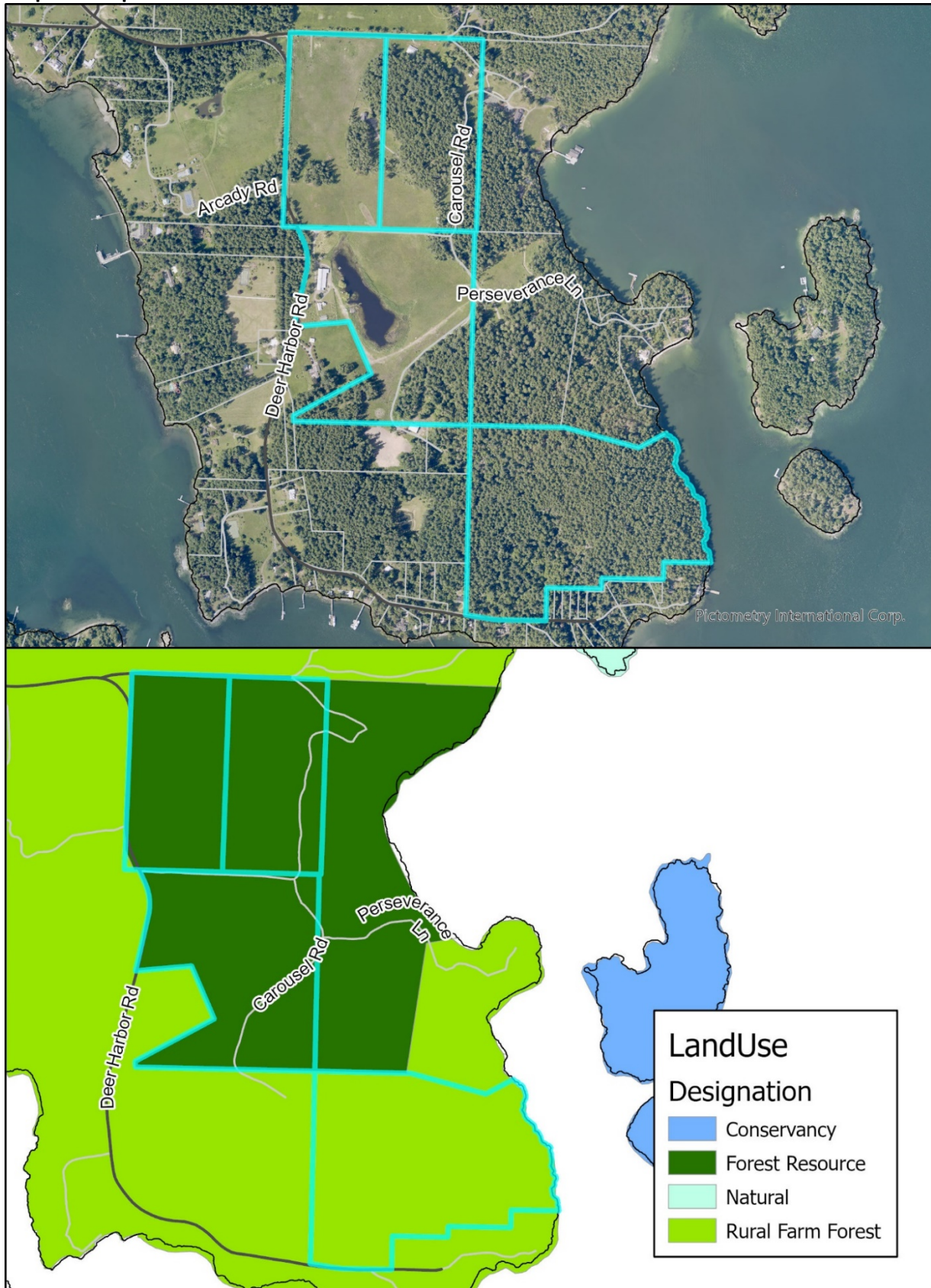


Table 7. Request 20-0004 Summary.

Request Number	Island	TPN	Address	Applicant Name
20-0004	Orcas	261723001000	PO BOX 227 Deer Harbor WA 98243	Orcas Vision Preserve C/O Alison Kartiganer
		261723002000		
		261732001000		
		261734001000		

Summary of Request

De-designate from FOR to RFF

Property owner is requesting de-designation from FOR to RFF to allow for the development of affordable housing in the rural area south of Deer Harbor. De-designation from FOR to a rural land use designation would allow the property owner to possibly develop a rural residential cluster development for affordable housing. Rural residential cluster development is subject to the standards in [SJCC 18.60.230 Rural residential cluster development](#).

Surrounding Land Uses and Designations

North: Residential, RFF
 South: Residential, RFF
 East: Residential, FOR
 West: Residential, RFF

Link to Request: <https://www.sanjuanco.com/DocumentCenter/View/21629/>

Analysis

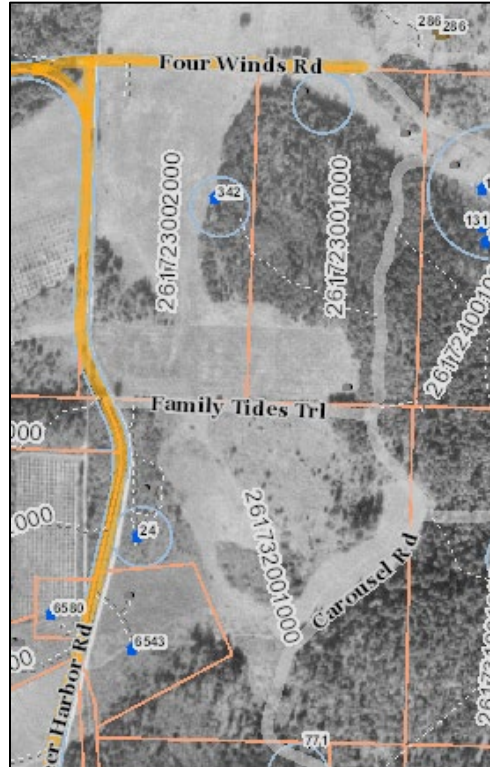
These parcels are not commercially significant for the production of forest products. These parcels are within a community water system service area, a service conducive to the conversion of forest land. The availability of services conducive to the conversion of forest land is one of the factors the County must consider per WAC 365-190-060(4)(a). None of the parcels participate in a forestry related tax program. The forest resource land designation criteria in WAC 365-190-060(4)(e) requires that the County consider whether the parcel participates in an open space or forest land tax program.

The subject parcels are not characterized by urban growth. They are several miles from Eastsound, the nearest on-island UGA.

The subject parcels are capable of being used to produce forest products. The GMA criteria in WAC 365-190-060(2)(b) require that the County evaluate whether lands that are capable of being used for forestry should be designated forest resource. Though these parcels have PFLG 2, suggesting they can produce forest products, they are not commercially significant. The subject parcels are not commercial significant because they are served by water service that are conducive to the conversion of forest land and are not enrolled in a forestry tax program.

In addition to having factors beyond control of the property owner that reduce commercial significance, the land is not currently and has not historically been used for producing forest products. Most of these parcels are not currently forested and have not been since at least 1932, as evidenced by the 1932 aerial photographs of the area in Map 27 below. Note, the 1932 aerials in Map 27 include the contemporary parcel lines and County roads for reference.

Map 27. 1932 Aerial Photograph of Subject Parcels.



Source: SJC GIS

The parcels do not meet the existing or proposed *Plan* designation criteria for Forest Resource Land. These parcels are not enrolled in the DFL tax program, a requirement in the existing designation criteria. The parcels are not commercially significant, are not enrolled in a forestry-related tax program, are not state trust lands, are not being managed for the long-term production of forest products, are not part of an area with at least 100 contiguous acres of forest land, and are not necessary to provide a logical boundary for an area of forest resource land.

Staff Recommendation

De-designate the parcels in this area because they are not commercially significant, do not meet the GMA criteria, and do not satisfy the *Plan* designation policies. The analysis in this report comprises new information regarding the designation criteria in WAC 365-190-060(2). Furthermore, a change in local designation policy during the *Plan* update, which these parcels also do not meet, is consistent with the criteria for natural resource land designation amendment established in WAC 365-190-040(10)(b)(i). Based on this new information and the parcels not meeting the proposed *Plan* designation criteria, de-designating these parcels meets the criteria of approval for natural resource land designation changes established in WAC 365-190-040(10)(b)(i) and (iv). No additional change is needed for TPN 261734001000.

APPENDIX A

Natural Resource Land Designation Review Methodology

Appendix A: Natural Resource Land Designation Review Methodology

The Growth Management Act (GMA) requires review of natural resource land designations for agricultural and forest resource lands during the periodic review of the San Juan County Comprehensive Plan (*Plan*). The County is not required to revisit the entire designation process but rather, evaluate designations for consistency with the GMA and the *Plan* criteria adopted in Element 2, Land Use (Washington Administrative Code (WAC) 365-196-480(2)(e)).

This document identifies the data sources, State and local natural resource designation criteria and the steps for conducting the review of agricultural and forest land designations on the *Plan* Official Maps. It describes deliverables by which the County will “show its work” and addresses the process for making policy decisions, obtaining public input and developing designation alternatives.

The methods used to evaluate the Ag and Forest Resource lands adopted with the original Comprehensive Plan in 1998 are unclear. After twenty-two years, the County has improved GIS tools that can be used to conduct the analysis of the State and local resource land designation criteria. The methodology relies on a phased approach to analyzing natural resource land designations.

Phased Approach

This methodology and process of reviewing natural resource land designations has four phases:

- Phase One:** Determine conformity or non-conformity to the GMA designation criteria for all tax parcels.
- Phase Two:** Determine conformity or non-conformity to the local designation criteria for all tax parcels. Identify possible designation changes.
- Phase Three:** Obtain public input on potential designation changes.
- Phase Four:** Analyze potential designation changes and prepare Official Map alternatives.

Data Sources

The review of natural resource land designations will use eight federal, state, and local data sources:

- **SJC *Plan* Official Maps (Official Maps).** The Official Maps of the *Plan* identify existing land use designations. <https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/comprehensive-plan-land-use>
- **San Juan County (SJC) Parcel Data.** This is a GIS data set regularly updated by the SJC Assessor’s office and provides numerous characteristics of each parcel including Assessor’s use codes, acreage and location. <https://data2017-01-09t190539232z-sjcgis.opendata.arcgis.com/datasets/parcels>
- **SJC Assessor’s Tax Map.** The tax map depicts parcels that are enrolled in the Current-Use Farm and Agriculture or Designated Forest Land tax programs.
- **United States Department of Agriculture Natural Resource Conservation Service (NRCS) Soil Maps.** The NRCS soil maps show the location and extent of the soils that are best suited to agricultural production. These maps have been updated and made web-based since the last Land Use Element was adopted. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

- **Washington State Department of Natural Resources (WDNR) Private Forest Land Grade (PFLG) Maps.** The PFLG maps shows the location and extent of forest soils. The WDNR, Natural Resources Conservation Service (NRCS) (previously the Soil Conservation Service), USDA Forest Service and Washington State University developed the PFLG using national soil survey standards. <http://data-wadnr.opendata.arcgis.com/datasets/wa-soils>
- **SJC Voluntary Stewardship Program (VSP) farm map.** The SJC Conservation District generated this map during the development of the VSP, a program to manage growth, protect critical areas, and maintain viable agriculture. The VSP farm map shows the location and type of agricultural occurring on existing farms in 2017.

GMA Resource Land Designation Criteria

The GMA mandates that communities designate, conserve, maintain and enhance the integrity of resource lands. The GMA designation criteria for natural resource lands are provided in Chapter 365-190 WAC. In general, natural resource lands are characterized by three factors:

- The land is not already characterized by urban growth;
- The land is used or capable of being used for resource production; and
- The land has long term commercial significance.

GMA Criteria for Designating Agricultural Resource Lands

Long term commercial significance is determined differently on agricultural and forest resource lands. Eleven agricultural resource land criteria are established in WAC 365-190-050(3)(c):

“(c) The land has long-term commercial significance for agriculture. In determining this factor, counties and cities should consider the following nonexclusive criteria, as applicable:

- (i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service;
- (ii) The availability of public facilities, including roads used in transporting agricultural products;
- (iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights;
- (iv) The availability of public services;
- (v) Relationship or proximity to urban growth areas;
- (vi) Predominant parcel size;
- (vii) Land use settlement patterns and their compatibility with agricultural practices;
- (viii) Intensity of nearby land uses;
- (ix) History of land development permits issued nearby;

- (x) Land values under alternative uses; and
- (xi) Proximity to markets.”

GMA Criteria for Designating Forest Resource Lands

WAC 365-190-060(2)(c), (3), and (4) establish the criteria for designating forest resource lands of long-term commercial significance:

“(c) The land has long-term commercial significance. When determining whether lands are used or capable of being used for forestry production, counties and cities should determine which land grade constitutes forest land of long-term commercial significance, based on local physical, biological, economic, and land use considerations. Counties and cities should use the private forest land grades of the department of revenue (WAC 458-40-530). This system incorporates consideration of growing capacity, productivity, and soil composition of the land. Forest land of long-term commercial significance will generally have a predominance of the higher private forest land grades. However, the presence of lower private forest land grades within the areas of predominantly higher grades need not preclude designation as forest land.

(3) Counties and cities may also consider secondary benefits from retaining commercial forestry operations. Benefits from retaining commercial forestry may include protecting air and water quality, maintaining adequate aquifer recharge areas, reducing forest fire risks, supporting tourism and access to recreational opportunities, providing carbon sequestration benefits, and improving wildlife habitat and connectivity for upland species. These are only potential secondary benefits from retaining commercial forestry operations, and should not be used alone as a basis for designating or dedesignating forest resource lands.

(4) Counties and cities must also consider the effects of proximity to population areas and the possibility of more intense uses of the land as indicated by the following criteria as applicable:

- (a) The availability of public services and facilities conducive to the conversion of forest land;
- (b) The proximity of forest land to urban and suburban areas and rural settlements: Forest lands of long-term commercial significance are located outside the urban and suburban areas and rural settlements;
- (c) The size of the parcels: Forest lands consist of predominantly large parcels;
- (d) The compatibility and intensity of adjacent and nearby land use and settlement patterns with forest lands of long-term commercial significance;
- (e) Property tax classification: Property is assessed as open space or forest land pursuant to chapter 84.33 or 84.34 RCW;

- (f) Local economic conditions which affect the ability to manage timberlands for long-term commercial production; and
- (g) History of land development permits issued nearby.”

Plan Designation Criteria

Section 2.3.D in Element 2, Land Use of the *Plan* includes the agricultural and forest resource land designation criteria. The agricultural resource land designation criteria are provided in Policy 2.3.D.5(a)(1):

- “(1) Lands in agricultural use which are characterized by the following criteria may be designated as Agricultural Resource Lands:
- 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: http://soils.usda.gov/survey/online_surveys/washington/#san2009; or
 - 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.”

This policy will be amended during the update for clarity. Any changes to the designation criteria will be incorporated into this methodology as needed. The recommended changes to clarify Policy 2.3.D.5(a)(1) include:

- Correcting the confusing reference to item “a” in item (i),
- The reference to the link for NRCS soil types in item (ii) must be removed because the link no longer works, and
- The “or” must be struck between items (i) and (ii) because it causes confusion. Based on a review of historic versions of this policy, it appears that this policy was always unclear and that the word “or” did not originally exist in the policy.

Policy 2.3.D.5(b)(1) provides the criteria for designating forest lands:

- “(1) Lands which are characterized by the following criteria may be designated Forest Resource Lands:
- 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.”

Phase One: Analyze All Parcels to Determine if they Meet the GMA Criteria

The central analysis of Phase One is calculating the long-term commercial significance index (LCSI). The LCSI is a metric that will help the County evaluate the relationship of each parcel to the GMA long-term commercial significance criteria. The method of calculating the LCSI for agricultural and forest resource lands is different for each type of resource. This is because the GMA long-term commercial significance criteria are specific to each resource.

A higher LCSI indicates an area is more commercially significant than an area with a lower score. The highest possible LCSI score is 50 points. An LCSI Z score per parcel will indicate the number of standard deviations each AG and FO LCSI score is from the mean. This metric indicates the degree to which a parcel is more or less commercially significant than other parcels. A positive Z score indicates that the parcel is more commercially significant than average. A negative Z score indicates that the parcel is less commercially significant than average.

To calculate the LCSI, each criterion will be assigned a score that indicates a degree to which the parcel is consistent with the GMA criteria. The score is multiplied by a weight assigned for each criterion. The weight modifiers are applied because some designation criteria have a greater influence on the potential for long-term commercial significance. The resulting total is the complete score for that criterion.

The process for calculating the LCSI is:

- Review each State designation criterion on each parcel.
- Identify the criterion factor applicable to the parcel.
- Multiply the score of the factor by the weight assigned to the State criterion.
- Do this for each criterion.
- Add up the total score for each parcel.
- The result is the Long-term Commercial Significance Index (LCSI).

Phase One, Step One: Long Term Commercial Significance Index (LCSI)

Phase One, Step One: Agricultural Resource Criteria

In Phase One, Step One, the GMA agricultural resource land long-term commercial significance criteria are quantified for each parcel. The end result of this step is an AG LCSI for every parcel in the County.

Two criteria from the long-term commercial significance criteria listed in WAC 365-190-050(3)(c) were not assigned individual LCSI scores. The nonexclusive list of criteria in WAC 365-190-050 is specified to be considered “as applicable” (WAC 365-190-050(3)(c)). The criterion from WAC 365-190-050(3)(c)(x), land values under alternative uses, is not quantified into an LCSI score because it is reasonable to assume that land values under uses other than agriculture will always be higher. Land values under alternative uses are presumed higher because more intense uses (residential and commercial uses) are often more financially lucrative. The history of land development permits nearby (WAC 365-190-050(3)(c)(ix)) is not calculated on its own but is combined with consideration of land use settlement patterns and intensity of

nearby land uses. These two factors are calculated based on the existing uses and surrounding parcel sizes which reflect the surrounding development history.

Weight Modifiers for Agricultural Resource Land GMA Designation Criteria

To calculate the LCSi, each criterion will be assigned a score that indicates a degree to which the parcel is consistent with the GMA criteria. The score is multiplied by a weight assigned for each criterion. The weight modifiers are applied because some designation criteria have a greater influence on the potential for long-term commercial significance. The resulting total is the complete score for that criterion (raw score times eight equals complete score). The agricultural resource LCSi weight modifiers are:

- **2X for soil and parcel size factors** [criteria 1 and 6]. These two factors are directly related to the characteristics of the parcel and its ability to support farming operations. Larger parcels and those with prime agricultural soils are likely to be more commercially productive.
- **1.5X for enrollment in the current-use tax program and proximity to markets** [criteria 3 and 9]. Enrollment in the current-use tax program indicates that the parcel is currently supporting a productive farm. Given the limitations on access to markets on the outer islands, ferry service and on-island urban areas have an added influence on commercial significance in the County.
- **1.25X for surrounding land use patterns and nearby intensity of land uses** [criteria 7 and 8]. Higher intensity uses and smaller surrounding lots are less compatible with commercial agriculture.
- **1X for access to roads, availability of public services, and proximity to UGAs** [criteria 2, 4, and 5]. These factors are important to consider but have the least influence on agriculture in the County. Access to roads is similar throughout most of the County, there are no freeways or highways and the whole County is served by the County road system. In the County, the difference between areas that are served by public services and those that are not is not as pronounced as other counties in Washington. Lands within UGAs will be removed from consideration in one of the next steps of this methodology.

Agricultural (AG) LCSi

The AG LCSi value will be the total calculated for each GMA designation criterion except as noted above. The maximum score possible is 50 points.

Table A1. WAC* 365-190-050(C) Agricultural Land Long-term Commercial Significance.

Criterion 1	
Criterion	The classification of prime and unique farmland soils as mapped by the NRCS (WAC 365-190-050(3)(c)(i))
Weight	X2
Factor Scores	
4	If more than 75% of parcel is prime farmland
3	If between 50 and 75% of parcel is prime farmland
2	If between 25 and 50% of parcel is prime farmland
1	If between 1 and 25% of parcel is prime farmland
0	If no prime farmlands

Criterion 2	
Criterion	The availability of public facilities, including roads used in transporting agricultural products (WAC 365-190-050(3)(c)(ii))
Weight	X1
Factor Scores	
4	If adjacent to a public road
2	If within 1,000 feet of a public road
0	If more than 1,000 feet from a public road

Criterion 3	
Criterion	Tax status, including whether lands are enrolled under the current use tax assessment. (WAC 365-190-050(3)(c)(iii))
Weight	X1.5
Factor Scores	
4	If parcel is in the current use farm and agriculture program
3	If parcel is in open-space farm conservation program
0	If not in the current-use farm and agriculture or open-space farm conservation programs

Criterion 4	
Criterion	The availability of public services (WAC 365-190-050(3)(c)(iv))
Weight	X1
Factor Scores	
4	If outside a community water system and sewer system <u>or large onsite septic service area</u>
2	If within a community water system service area and outside a sewer system <u>or large onsite septic service area</u>
0	If within a community water system and sewer system <u>or large onsite septic service area</u>

Criterion 5	
Criterion	Relationship or proximity to urban growth areas (WAC 365-190-050(3)(c)(v))
Weight	X1
Factor Scores	
4	If more than one-half mile away from a UGA
2	If between one half and one quarter mile of a UGA
0	If closer than one quarter mile or within a UGA

Criterion 6	
Criterion	Predominant parcel size (WAC 365-190-050(3)(c)(vi))
Weight	X2
Factor Scores	
4	If parcel larger than <u>or equal to</u> 20 acres
3	If parcel larger than <u>or equal to</u> 10 and less than 20 acres
2	If parcel larger than <u>or equal to</u> 5 and less than 10 acres
1	If parcel larger than <u>or equal to</u> 2 and less than 5 acres
0	If parcel less than 2 acres

Criterion 7	
Criterion	Land use settlement patterns and their compatibility with agricultural practices (WAC 365-190-050(3)(c)(vii))
Weight	X1.25
Factor Scores	
4	If average adjacent parcel size is 20 acres or larger
3	If average adjacent parcel size is larger than <u>or equal to</u> 10 and less than 20 acres
2	If average adjacent parcel size is larger than <u>or equal to</u> 5 and less than 10 acres
1	If the average adjacent parcel size is larger than <u>or equal to</u> 2 and less than 5 acres
0	If the average adjacent parcel size is less than 2 acres

Criterion 8	
Criterion	Intensity of nearby land uses (WAC 365-190-050(3)(c)(viii))
Weight	X1.25
Factor Scores	
4	If any neighboring parcel has AG or open space Assessor's use code
2	If any neighboring parcel has a single-family residential use code and no neighboring parcel has an AG or open space Assessor's use code
0	If no neighboring parcel has the use codes listed above.

Criterion 9	
Criterion	Proximity to markets (WAC 365-190-050(3)(c)(xi))
Weight	X1.5
Factor Scores	
4	If on San Juan, Lopez, or Orcas Islands
3	If on Shaw Island
1	If on Stuart, Waldron, Blakely, or Decatur Islands
0	If on any other island

*Washington Administrative Code (WAC).

Phase One, Step One:

Long-Term Commercial Significance Index (LCSI) Deliverables for AG Resource Lands

The AG Resource Land LCSI will be calculated for all County parcels using GIS software. The results will be available in the following formats:

1. A map showing the AG LCSI score for each parcel in the County, and
2. A data table depicting the following for all parcels, showing at minimum:
 - Tax parcel number;
 - Acreage;
 - AG LCSI score for each criterion;
 - The total AG LCSI score; and
 - The AG LCSI Z score value. This score indicates how many standard deviations the value is above or below the mean for all parcels.

Table A2. Example Phase One, Step One: Data Table Columns for AG Resource Land LCSIs*.

Parcel Number	Acres	LCSI Criterion 1	LCSI Criterion 2	LCSI Criterion 3	LCSI Criterion 4	LCSI Criterion 5	LCSI Criterion 6	LCSI Criterion 7	LCSI Criterion 8	LCSI Criterion 9	AG LCSIs	AG LCSIs Z Score

*LCSI stands for Long Term Commercial Significance Index

Phase One, Step One: Forest Resource Criteria

Weight Modifiers for Forest Land GMA Designation Criteria

To calculate the LCSIs, each criterion will be assigned a score that indicates a degree to which the parcel is consistent with the GMA criteria. The score is multiplied by a weight assigned for each criterion. The weight modifiers are applied because some designation criteria have a greater influence on the potential for long-term commercial significance. The resulting total is the complete score for that criterion (raw score times eight equals complete score). The forest resource LCSIs weight modifiers are:

- **2X for PFLG class, DFL or open-space tax class, and parcel size** [criteria 8, 5, and 3]. These three factors are directly related to the characteristics of the parcel and its ability to support forestry. Larger parcels with better PFLG classes that participate in the DFL program are more likely to be commercially productive;
- **1.5X for proximity to UGAs and availability of public services** [criteria 1 and 2]. Lands served by public services and those near UGAs and activity centers will face additional pressure to develop with incompatible uses;
- **1.25X for history of nearby development and nearby development intensity** [criteria 4 and 7]. Higher intensity uses and smaller surrounding lots are less compatible with commercial forestry. Parcels surrounded by smaller lots and nonresidential development will face pressure to develop with incompatible uses; and
- **1X for local economic conditions** [criterion 6]. Access to markets through ferry service and on-island UGAs and activity centers are lower-weight because harvested timber is not likely to be marketed locally and can be barged off-island.

Forest Resource Land (FO) Long-Term Commercial Significance Index (LCSIs)

The FO LCSIs value will be the total calculated for each GMA designation criteria listed below. The criteria are weighted to account for local circumstances in the County. The maximum score possible is 50 points.

Table A3: WAC* 365-190-060(4) Forest Resource Land Long-term Commercial Significance.

Criterion 1	
Criterion	The availability of public services and facilities conducive to the conversion of forest land. (WAC 365-190-060(4)(a))
Weight	X1.5
Factor Scores	
4	If outside a community water system and sewer system <u>or large onsite septic service area</u>
2	If within a community water system service area and outside a sewer system <u>or large onsite septic service area</u>
0	If within a community water system and sewer system <u>or large onsite septic service area</u>

Criterion 2	
Criterion	The proximity of forest land to urban and suburban areas and rural settlements. (WAC 365-190-060(4)(b))
Weight	X1.5
Factor Scores	
4	If more than one-half mile away from an UGA, activity center, or LAMIRD
2	If between one half and one quarter mile of an UGA, activity center, or LAMIRD
0	If within a quarter mile or inside a UGA, activity center, or LAMIRD

Criterion 3	
Criterion	The size of the parcels. (WAC 365-190-060(4)(c))
Weight	X2
Factor Scores	
4	If parcel larger than <u>or equal to</u> 20 acres
3	If parcel larger than <u>or equal to</u> 15 and less than 20 acres
2	If parcel larger than <u>or equal to</u> 10 and less than 15 acres
1	If parcel larger than <u>or equal to</u> 5 and less than 10 acres
0	If parcel less than 5 acres

Criterion 4	
Criterion	The compatibility and intensity of adjacent and nearby land use and settlement patterns with forest lands. (WAC 365-190-060(4)(d))
Weight	X1.25
Factor Scores	
4	If average adjacent parcel size is 20 acres or larger
3	If average adjacent parcel size is larger than or equal to 10 and less than 20 acres
2	If average adjacent parcel size is larger than or equal to 5 and less than 10 acres
1	If the average adjacent parcel size is larger than or equal to 2 and less than 5 acres
0	If the average adjacent parcel size is less than 2 acres

Criterion 5	
Criterion	Property tax classification. (WAC 365-190-060(4)(e))
Weight	X2
Factor Scores	
4	If parcel is in the designated forestland (DFL) tax program
3	If parcel is in the open-space timber land tax program
0	If not in the DFL or open-space timber land tax program

Criterion 6	
Criterion	Local economic conditions which affect the ability to manage timberlands for long-term commercial production [interpreted as access to markets] (WAC 365-190-060(4)(f))
Weight	X1
Factor Scores	
4	If on San Juan, Lopez, Shaw, or Orcas Islands
3	If on Stuart, Waldron, Blakely, or Decatur Islands
0	If on any other island

Criterion 7	
Criterion	History of land development permits issued nearby (WAC 365-190-060(4)(g))
Weight	X1.25
Factor Scores	
4	If any neighboring parcel has forestry or open space Assessor's use code
2	If any neighboring parcel has a single-family residential or undeveloped use code and no neighboring parcel has a forestry or open space Assessor's use code
0	If no neighboring parcel has the use codes listed above.

Criterion 8	
Criterion	Private Forest Land Grade (PFLG) (WAC 365-190-060(2)(c))
Weight	X2
Factor Scores	
4	If any part of the parcel has PFLG 1
3	If any part of the parcel has PFLG 2
2	If any part of the parcel has PFLG 3
1	If any part of the parcel has PFLG 4
0	If PFLG is blank or 0

* Washington Administrative Code (WAC).

Phase One, Step One:

Long-Term Commercial Significance Index (LCSI) Deliverables for FO Resource Lands

The Forest Resource Land LCSI will be calculated for all County parcels using GIS software. The results will be available in the following formats:

1. A map showing the FO LCSI score for each parcel throughout the County, and
2. A data table depicts the following for all parcels, showing at minimum:
 - Tax parcel number;
 - Acreage;
 - FO LCSI score for each criterion;
 - The total FO LCSI score; and
 - The FO LCSI Z score value. This score indicates how many standard deviations the value is above or below the mean for all parcels.

Table A4. Example: Phase One, Step One, Data Table Columns for Forest Resource Land LCSI* Scores.

Parcel Number	Acres	LCSI Criterion 1	LCSI Criterion 2	LCSI Criterion 3	LCSI Criterion 4	LCSI Criterion 5	LCSI Criterion 6	LCSI Criterion 7	LCSI Criterion 8	FO LCSI	FO LCSI Z Score

*LCSI stands for Long Term Commercial Significance Index

Phase One, Step Two: Remove Parcels Characterized by Urban Growth from Consideration

One of the main GMA criteria for natural resource lands is that it is not characterized by urban growth. Urban growth is defined in RCW 36.70A.030(25):

(25) "Urban growth" refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources, rural uses, rural development, and natural resource lands designated pursuant to RCW 36.70A.170. A pattern of more intensive rural development, as provided in RCW 36.70A.070(5)(d), is not urban growth. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth.

During Step Two, parcels within UGAs are removed from consideration for natural resource land designation. There are currently no designated resource lands within the three UGAs in the County. There are only a few places in the County where natural resource lands are adjacent to or nearly about a UGA. These lands near UGAs will be reexamined when staff makes a recommendation in Phase Four regarding designation to ensure that resource lands remain uncharacterized by urban growth.

Phase One, Step Three: Identify Parcels Used or Capable of Being Used for Resource Production

In this step, the maps developed in Step One are joined with maps identifying lands currently being used for resource production. The maps to be joined are:

- The map showing the AG LCSi score for each parcel from Phase One, step one;
- The map showing the FO LCSi score for each parcel from Phase One, step one;
- The SJC tax map showing parcels in Current Use Agriculture and Designated Forest Land tax programs; and
- The SJC Voluntary Stewardship Program (VSP) farm map.

Phase One, Step Three: Deliverables for AG and FO Resource Lands

1. Two maps showing:
 - Parcels that are in the Current Use Agriculture tax program or on the SJC VSP farm map. These parcels will be symbolized by their AG LCSi scores, and
 - Parcels that are in the Designated Forest Land (DFL) tax class. These parcels will be symbolized by their FO LCSi scores.
2. Corresponding data tables for the maps listed above showing the following for each parcel:
 - Tax parcel number;
 - Acreage;
 - Participation in the Current Use Agriculture program, DFL tax class, or on the VSP farm map;

- AG and FO LCSi score for each criterion; and
- The total AG and FO LCSi score for each parcel.

Table A5. Example Data Table Columns for Agricultural Resource Land Scores.

Parcel Number	Acreage	AG LCSi Score for each Criteria (9 total)	Total AG LCSi Score	Parcel in AG Open Space (Y/N)	Parcel on VSP Farm Map (Y/N)

*LCSi stands for Long Term Commercial Significance Index

Table A6. Example Data Table Columns for Forest Resource Land Scores.

Parcel Number	Acreage	FO LCSi Score for Each Criteria (8 total)	Total FO LCSi *Score	Parcel in Forestry Open Space (Y/N)	Parcel in DFL (Y/N)

*LCSi stands for Long Term Commercial Significance Index

Phase One Summary

Throughout Phase One, maps will be produced that will help the County evaluate the long-term commercial significance in different areas of the County. These maps will show regions with higher LCSi scores. Later, LCSi scores on parcels with current farm and forestry operations will be considered to establish what scores suggest the presence of commercial significance. These scores will provide a baseline understanding of what lands might be commercially significant.

In addition to considering maps, the LCSi scores of long-term commercial significance on each parcel will be compared relative to other parcels. The following four metrics will be considered:

- Each parcel’s AG and FO LCSi score;
- The mean AG and FO LCSi scores;
- The median AG and FO LCSi scores; and
- The Z scores for each parcel. The Z score is the number of standard deviations each AG and FO LCSi score is from the mean.

The measures of central tendency, the mean and median LCSi scores, will help the County understand what average commercial significance is. The Z scores will indicate the degree to which each parcel is more or less commercially significant than the average parcel. A positive Z score indicates that the parcel is more commercially significant than average. A negative Z score indicates that the parcel is less commercially significant than average. The County will use these metrics to decide what LCSi score indicates AG and FOR long-term commercial significance.

The following areas are expected to have AG and FO LCSi scores above the average and can help identify the range of scores that indicate the presence long-term commercial significance:

- Parcels participating in the current-use, open space, and DFL tax programs;

- Farms shown on the VSP current farm maps; and
- Larger residential or undeveloped parcels.

The following areas are expected to have AG and FO LCSIs scores below the average and can help identify the range of scores that suggest an area does not have long-term commercial significance:

- Parcels in urban growth areas and activity centers;
- Small parcels developed with residential uses; and
- Parcels on the smaller outer islands such as Center Island.

Above and below average AG and FO LCSIs scores will factor into the identification of a preliminary list of natural resource land designation changes on individual parcels at the end of Phase Two. The preliminary list will be refined by public input during Phase Three. Then, staff will perform in-depth and area-specific analysis of potential changes during Phase Four. The in-depth analysis will inform any amendments to natural resource land designations adopted during the *Plan* update.

Phase Two: Analyze All Parcels: Do they Meet the *Plan* Criteria?

During Phase Two, all parcels on the Official Maps will be compared with the results of Phase One for conformity to the *Plan* designation criteria (Element 2, Land Use, Policy 2.3.D(5)(a) and (b)). Phase Two will result in a preliminary list of parcels that may qualify for designation or de-designation as natural resource lands. Phase Two has the following three steps:

- **Step One:** divide Phase One results into lands that are and are not designated natural resource lands on the Official Maps;
- **Step Two:** review parcels for whether or not they meet the *Plan* criteria; and
- **Step Three:** develop a preliminary list of parcels that may qualify for designation or de-designation as natural resource lands based on GMA and *Plan* criteria.

Phase Two, Step One: Divide Phase One Results into Parcels That Are and Are Not Designated Natural Resource Land on the Official Maps

In Phase Two, Step One, the Phase One results are separated into lands that are and are not designated natural resource land. This will allow comparison of the LCSIs scores between designated and not designated natural resource lands in Phase Two, Step 3. Phase Two, Step One tasks include:

1. Identify parcels from Phase One that are and are not designated Agricultural Resource (AG) on the Official Maps.
 - a. Divide Phase One, Step One AG LCSIs parcels into those that are and are not designated AG.
 - b. Divide Phase One, Step Three AG LCSIs parcels with existing farms into those that are and are not designated AG.
2. Identify parcels from Phase One that are and are not designated Forest Resource (FO) on the Official Maps.

- a. Divide Phase One, Step One FO LCSI parcels into those that are and are not designated FO.
- b. Divide Phase One, Step Three FO LCSI parcels with current forestry operations into those that are and are not designated FO.

Phase 2, Step One: Deliverables

Four maps showing:

1. AG LCSI scores, divided into;
 - a. Parcels designated AG;
 - b. Parcels not designated AG;
2. AG LCSI scores on existing farms, divided into;
 - a. Parcels designated AG with existing farms;
 - b. Parcels not designated AG with existing farms;
3. FO LCSI scores, divided into;
 - a. Parcels designated FO;
 - b. Parcels not designated FO;
4. FO LCSI scores on parcels with existing forestry operations, divided into;
 - a. Parcels designated FO with existing forestry operations; and
 - b. Parcels not designated FO with existing forestry operations.
5. Data tables for each map providing for each parcel, at minimum the:
 - Tax parcel number;
 - Acreage;
 - Land use designation;
 - AG and FO LCSI score for each GMA criterion;
 - The total AG and FO LCSI score; and
 - The AG and FO LCSI Z score.

Table A7. Example Phase Two, Step One, Data Table Columns for Agricultural Resource Lands.

Parcel Number	Parcel Acreage	Land Use Designation	LCSI Score for Each Criteria (9 total)	Total LCSI Score	Total LCSI Z Score

*LCSI stands for Long Term Commercial Significance Index

Table A8. Example Phase Two, Step One, Data Table Columns for Forest Resource Lands.

Parcel Number	Parcel Acreage	Land Use Designation	LCSI Score for Each Criteria (9 total)	Total LCSI Score	Total LCSI Z Score

*LCSI stands for Long Term Commercial Significance Index

Step Two: Review for Consistency with *Plan* Criteria

The Phase Two, Step Two results identify lands that do or do not meet the *Plan* designation criteria in Element 2, Land Use, Policies 2.3.D(5)(a) and b using the following tasks:

Agricultural Resource Lands

1. Locate all parcels that meet the AG designation criteria in the *Plan*.
 - a. Select all parcels that are both larger than ten acres and have NRCS prime farmland soils. Create a new GIS layer from the selected parcels.
 - b. From the created in task (1)(a) above, select all parcels that are also under an agriculture conservation easement or enrolled in the current-use agriculture tax program. Create a new GIS layer from the selected parcels.
 - c. Identify all other parcels that do not meet the *Plan’s* AG designation criteria on the map created in b above.

Forest Resource Lands

2. Locate all parcels that meet the FO designation criteria in the *Plan*.
 - a. Select parcels that have all four of the following characteristics:
 - i. Parcels with PFLG 1 - 4;
 - ii. Parcels 20 acres or larger;
 - iii. Parcels with Designated Forest Land or enrolled in the Open Space Timber tax program; and
 - iv. Parcels with forestry Assessor’s use codes.
 - b. Create a new map layer from the parcels selected in Task (2)(a) above. These parcels meet the *Plan’s* designation criteria.
 - c. Identify all other parcels that do not meet the *Plan’s* FO designation criteria on the map above.

Phase Two, Step Two Deliverables

1. Five maps showing:
 - a. Parcels that meet the first AG designation criterion [parcels > 10 acres with NRCS farmland soils];
 - b. Parcels that meet the second AG designation criterion [parcels > 10 acres, with NRCS farmland soils, and enrolled in the Current-Use Agriculture tax program];

- c. Parcels that do not meet the AG designation criteria;
 - d. Parcels that meet the *Plan's* FO designation criteria; and
 - e. Parcels that do not meet the *Plan's* FO designation criteria.
2. Data tables for each map showing for all parcels, at a minimum:
 - Tax parcel number;
 - Acreage;
 - Land use designation; and
 - Whether the parcel meets the *Plan's* AG or FO designation criteria.

Table A9. Example Phase Two, Step Two Data Table for Agricultural Resource Lands.

Parcel Number	Parcel Acreage	Land Use Designation	Does the Parcel Meet AG Designation Criterion 1 (Y/N)	Does the Parcel Meet AG Designation Criterion 2 (Y/N)

Source: Natural Resource Land Designation Review Methodology.

Table A10. Example Phase Two, Step Two Data Table for Forest Resource Lands.

Parcel Number	Parcel Acreage	Land Use Designation	Meet FO Designation Criterion 1 (Y/N)	Meet FO Designation Criterion 2 (Y/N)	Meet FO Designation Criterion 3 (Y/N)	Meet FO Designation Criterion 4 (Y/N)	Meet all 4 FO Designation Criterion (Y/N)

Source: Natural Resource Land Designation Review Methodology.

Step Three: LCSi on Lands That Meet *Plan* Natural Resource Land Designation Criteria

Phase Two, Steps One and Two are compared with each other to establish AG and FO LCSi scores for lands that do and do not meet the *Plan* criteria. Phase Three, Step Three will show the degree to which lands that meet and do not meet the *Plan* criteria have long-term commercial significance. A preliminary list of parcels that are candidates for designation or de-designation as natural resource lands will be developed. The following tasks compose Step Three:

1. Combine the maps from Phase Two, Step One showing AG LCSi on parcels that are and are not designated AG with the maps from Phase Two, Step Two that show lands that may or may not meet the *Plan's* AG designation criteria. The resulting maps will show parcels that are:
 - a. Designated AG on the Official Maps and meet the *Plan* criteria, symbolized by AG LCSi;
 - b. Not designated AG on the Official Maps and meet the *Plan* criteria, symbolized by AG LCSi;
 - c. Designated AG on the Official Maps and do not meet the *Plan* criteria, symbolized by AG LCSi; and
 - d. Not designated AG on the Official Maps and do not meet the *Plan* criteria, symbolized by AG LCSi.

2. Combine the maps from Phase Two, Step One showing FO LCSI on parcels that are and are not designated FO with maps from Phase Two, Step Two that show lands that may or may not meet the Plan's FO designation criteria. The resultant map(s) will show parcels that are:
 - a. Designated FO on the Official Maps and meet the Plan criteria, symbolized by FO LCSI;
 - b. Not designated FO on the Official Maps and meet the Plan criteria, symbolized by FO LCSI;
 - c. Designated FO on the Official Maps and do not meet the Plan criteria, symbolized by FO LCSI; and
 - d. Not designated FO on the Official Maps and do not meet the Plan criteria, symbolized by FO LCSI.
- ~~3. Use the maps created in Phase Two, Steps Three – Tasks 1 and 2 to identify a preliminary list of candidate parcels for designation changes. Preliminary candidate lands for designation changes are those that are:
 - a. ~~**Candidates for de-designation.**~~ Designated AG or FO on the Official Maps that do not meet the *Plan* criteria and have a lower LCSI score relative to other parcels [designated, do not meet criteria, and have low commercial significance], and
 - b. ~~**Candidates for designation as a natural resource land.**~~ Not designated AG or FO on the Official Maps, meet the *Plan* criteria, and have a higher LCSI score relative to other parcels [meet the criteria and have high commercial significance].~~
- ~~4. Use the data and maps from Phase Two, Tasks 1 and 2 to identify a preliminary list of parcels for further discussion. Further discussion is needed because these parcels appear to meet either the *Plan* or GMA criteria, but not both. Parcels whose designation should be discussed are those:
 - a. Designated AG or FO on the Official Maps that do not meet the *Plan* criteria and have a higher LCSI score relative to other parcels [designated, do not meet the criteria, and have a high commercial significance]. These are lands that may or may not be designated as natural resource lands;
 - b. Designated AG or FO on the Official Maps, meet the *Plan* criteria, and have a lower LCSI score relative to other parcels [designated, meets criteria, and low commercial significance]. These are lands that may or may not be designated as natural resource lands;
 - c. Not designated AG or FO on the Official Maps, meet the *Plan* criteria, and have a lower LCSI score relative to other parcels [not designated, meets criteria, and have a low commercial significance]. These are lands that may or may not be designated as natural resource lands; and
 - d. Not designated AG or FO on the Official Maps, do not meet the *Plan* criteria, and have a higher LCSI score relative to other parcels [not designated, do not meet criteria, and have a higher commercial significance]. These are lands that may or may not be designated as natural resource lands.~~
- ~~5. Use the maps created in Phase Two, Step Three – Tasks 1 and 2 to identify lands that are probably not candidates for designation changes. These are lands that are:
 - a. Not designated AG or FO on the Official Maps, do not meet the *Plan* criteria, and have a lower LCSI score relative to other parcels [not designated, do not meet the criteria, and have a lower commercial significance], and~~

- b. ~~Designated AG or FO on the Official Maps, meet the *Plan* criteria, and have a higher LCSI score relative to other parcels [designated, meet criteria, and high-commercial significance].~~

Table A11. Parcel Categorization in Phase Two, Step Three.

Parcels that are:	Higher LCSI* Score	Lower LCSI* Score
Designated & meet criteria	Don't change designation (5.b)	Maybe change designation (4.b)
Designated & do not meet criteria	Maybe change designation (4.a)	Change designation (de-designate) (3.a)
Not designated & meet criteria	Designate as resource lands (3.b)	Maybe change designation (4.c)
Not designated & do not meet the criteria	Maybe change designation (4.d)	Not natural resource lands (5.a)

*LCSI stands for Long-Term Commercial Significance Index, see Phase One.

Step Three: Deliverables

Step three will produce:

- ~~1. Preliminary candidate lands for land use designation changes. These are lands that are either:

 - a. ~~Designated, do not meet the *Plan* criteria, and have a lower LCSI score, or~~
 - b. ~~Not designated, meets the *Plan* criteria, and have a higher LCSI score.~~~~
- ~~2. Parcels that require further discussion. Further discussion is needed because these parcels appear to meet either the *Plan* or GMA criteria, but not both. These parcels are:

 - a. ~~Designated, do not meet the *Plan* criteria, and have a higher commercial significance;~~
 - b. ~~Designated, meets the *Plan* criteria, and have a lower commercial significance;~~
 - c. ~~Not designated, meets the *Plan* criteria, and have a lower commercial significance; or~~
 - d. ~~Not designated, do not meet the *Plan* criteria, and have a higher commercial significance.~~~~
- ~~3. Lands that are probably not candidates for designation changes. These are parcels that are:

 - a. ~~Not designated, do not meet the criteria, and have a lower commercial significance, and~~
 - b. ~~Designated, meet criteria, and high-commercial significance.~~~~
4. Maps showing existing resource land designations, parcels with higher LCSI, and those parcels that meet the *Plan* designation criteria.
5. Data tables for the parcels on each map showing at a minimum the:
 - Tax parcel number;
 - Acreage;
 - Land use designation;
 - AG and FO LCSI score;
 - Whether the parcel meets the existing *Plan* AG or FO designation criteria; and
 - Whether the parcel meets the proposed *Plan* AG or FO designation criteria.

Table A12. Example Phase Two, Step Three, Data Table for Agricultural Resource Lands.

Parcel Number	Parcel Acreage	Land Use Designation	LCSI* Score for Each Criteria (9 total)	Total AG LCSI* Score	Does the Parcel Meet the existing AG Designation Criteria (Y/N)	Does the Parcel Meet the proposed AG Designation Criteria (Y/N)

*LCSI stands for Long Term Commercial Significance Index

Table A13. Example Phase Two, Step Three, Data Table for Forest Resource Lands.

Parcel Number	Parcel Acreage	Land Use Designation	FO LCSI* Score for Each Factor (8 total)	Total FO LCSI* Score	Does the Parcel Meet the existing FO Designation Criteria (Y/N)	Does the Parcel Meet the proposed FO Designation Criteria (Y/N)

*LCSI stands for Long Term Commercial Significance Index

Phase Three: Public Input

The County Council and Planning Commission and the public, including stakeholder groups, will be briefed on the Phase Two results. They will provide specific feedback will be requested about regarding the parcels with requested natural resource land designation changes that have potential for de-designation, or designation as a resource land and those parcels that may have ambiguous results. Throughout the Plan update, property owners have submitted requests for changes to their land use designations. A handful of these submitted requests are for changes to natural resource land designations. The Countywide review of natural resource land designations will form the basis of decisions for these requests. Ambiguous parcels are those that meet either the GMA or Plan criteria but not both. An example of ambiguous results are parcels that are designated natural resource lands, meet the Plan criteria, but have low commercial significance (do not meet GMA criteria).

The four types of results marked for further discussion are not clear-cut yes or no for designation. The discussion with stakeholders, Council, and PC will clarify what should be done with these parcels in the grey area. The County Council, Planning Commission, and stakeholder groups will provide their local knowledge to help clarify the following:

- Whether areas with ambiguous results are currently used for agricultural and forestry operations, and
- If these areas could be used for resource production.

Phase Three, Step One: Brief the Planning Commission and County Council

Staff will prepare initial analysis and a staff recommended action based on the Phase One and Two results for each of the land use designation change requests received. The Planning Commission will be briefed on the staff analysis and recommendation. After the briefing, a public comment period will follow to give the public an opportunity to provide input on the staff recommendation. The public comment period will be followed by the Planning Commission considering their preliminary response to each request at their regularly scheduled meeting.

After a briefing, the ARC and CD will be asked for a recommendation about the parcels identified in Phase Two that need additional discussion:

- ~~1. Designated AG or FO on the Official Maps that do not meet the *Plan* criteria and have an LCSi score at or above the threshold set in Phase One [designated, do not meet the *Plan* criteria, and have a high commercial significance];~~
- ~~2. Designated AG or FO on the Official Maps, meet the *Plan* criteria, and have an LCSi score below the threshold set in Phase One [designated, meets *Plan* criteria, and low commercial significance];~~
- ~~3. Not designated AG or FO on the Official Maps, meet the *Plan* criteria, and have an LCSi score below the threshold set in Phase One [not designated, meets *Plan* criteria, and have a low commercial significance]; and~~
- ~~4. Not designated AG or FO on the Official Maps, do not meet the *Plan* criteria, and have an LCSi score above the threshold set in Phase One [not designated, do not meet criteria, and have a higher commercial significance].~~

After considering the lands identified for additional discussion, the ARC and CD will be asked to make a recommendation about the parcels identified in Phase Two as:

- ~~1. **Candidates for de-designation:** designated AG or FO, do not meet the designation criteria, and have a lower commercial significance, and~~
- ~~2. **Candidates for designation:** Not designation AG or FO, meet the designation criteria, and have a higher commercial significance.~~

Finally, these stakeholders can provide their knowledge of existing farms that may have been missed in the first two phases of this analysis. These parcels will already have an AG LCSi calculated in Phase One and can be evaluated for consistency with the *Plan* designation criteria. Staff will consider their recommendations when preparing a recommendation in Phase Three, Step Two.

Phase Three, Step Two: Planning Commission Workshops and Work Sessions

After the Planning Commission has provided a preliminary response to each request, that response will be provided to the public for their consideration at public workshops and Planning Commission work sessions. This will give members of the public to provide comments to the Planning Commission as they prepare a pre-hearing draft of responses to the land use designation change requests. The pre-hearing draft of responses will become the list of candidates for designation changes to be analyzed in-depth during Phase Four.

Phase Four: Prepare Detailed Analysis

During Phase Four, the parcels identified as candidates for changes to land use designation in the previous phases will be further analyzed for consistency with the GMA and *Plan* requirements. This review will take a closer look at the designation criterion and the specific details such as documentation of how the area does or does not meet the relevant WAC and *Plan* policies. Once the possible changes have been analyzed, staff will develop natural resource land designation alternatives to be considered with the *Plan* update.

Phase Four has two primary steps:

1. Analyze possible designation changes developed in the previous phases, and
2. Develop natural resource land designation alternatives.

Phase Four, Step One: In-depth Analysis

A preliminary list of candidate parcels for designation changes is developed in the previous phases of this review. In Phase Four, Step One, these candidates will be given an in-depth review for consistency with the GMA and *Plan* natural resource land designation criteria. This in-depth review will help staff determine their recommendation for designation changes.

Table A14 provides an example of the tables that will be used for in-depth analysis on individual parcel or clusters. The table will be completed for all areas proposed for either designation or de-designation as natural resource lands.

Phase Four will ensure that alternatives are specifically reviewed for consistency with the GMA and *Plan* designation criteria before any changes to natural resource land designation changes can be adopted.

Table A14. In-Depth Agricultural Resource Land Review Matrix.

Description of Area:	TPN(s):
	Surrounding Land Uses:
Criteria	Area Characteristics
WAC 365-190-050(3)(a) The land is not already characterized by urban growth. To evaluate this factor, counties and cities should use the criteria contained in WAC 365-196-310.	The area is X miles from the nearest UGA and is only developed at a density of 1 dwelling unit per X acres.
WAC 365-190-050(3)(b) The land is used or capable of being used for agricultural production. This factor evaluates whether lands are well suited to agricultural use based primarily on their physical and geographic characteristics. Some agricultural operations are less dependent on soil quality than others, including some livestock production operations.	Approximately X percent of the acreage in this area is in the current-use agriculture taxation program. There are X parcels in this area shown on the VSP farm map (Exhibit X). Lands in the current-use agriculture taxation program and those shown on the VSP farm map are currently being used for agricultural production.
WAC 365-190-050(3)(b)(i) Lands that are currently used for agricultural production and lands that are capable of such use must be evaluated for designation. The intent of a landowner to use land for agriculture or to cease such use is not the controlling factor in determining if land is used or capable of being used for agricultural production. Land enrolled in federal conservation reserve programs is recommended for designation based on previous agricultural use, management requirements, and potential for reuse as agricultural land.	As noted above, much of this area is currently being used for agricultural production. The remainder of this area is being analyzed for whether it is capable of being used for agricultural production regardless of the property-owner's intent.
WAC 365-190-050(3)(b)(ii) In determining whether lands are used or capable of being used for agricultural production, counties and cities shall use the land-capability classification system of the United States Department of Agriculture Natural Resources Conservation Service as defined in relevant Field Office Technical Guides. These eight classes are incorporated by the United States Department of Agriculture into map units described in published soil surveys, and are based on the growing capacity, productivity and soil composition of the land.	The area is covered by approximately X acres of prime farmland soils as classified by the NRCS.
WAC 365-190-050(3)(c) The land has long-term commercial significance for agriculture. In determining this factor, counties and cities should	This area [does or does not] have long-term commercial significance, see analysis of each criterion below.

Description of Area:	TPN(s):
	Surrounding Land Uses:
Criteria	Area Characteristics
consider the following nonexclusive criteria, as applicable:	
WAC 365-190-050(3)(c)(i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service	About X percent of this area has soils classified as prime farmland on the NRCS soil survey (Exhibit X).
WAC 365-190-050(3)(c)(ii) The availability of public facilities, including roads used in transporting agricultural products	This area [is or is not] on a ferry served island. The County road and WA State Ferry systems provide this area with public facilities used in transporting agricultural products (Exhibit X).
WAC 365-190-050(3)(c)(iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights	More than X percent of the acreage in the area is in current use taxation (Exhibit X).
WAC 365-190-050(3)(c)(iv) The availability of public services;	The area has access to police, fire, parks, and schools in the County. Response times for emergency services are potentially greater in the further reaches of the County.
WAC 365-190-050(3)(c)(v) Relationship or proximity to urban growth areas	This area [is or is not] within an urban growth area. [If outside a UGA] The area is about X miles from the nearest UGA.
WAC 365-190-050(3)(c)(vi) Predominant parcel size	The average parcel size in this area is X acres. About X percent of parcels are between 5 and 20 acres (Exhibit X).
WAC 365-190-050(3)(c)(vii) Land use settlement patterns and their compatibility with agricultural practices	This area abuts a [forest resource, rural area, activity center, or UGA] (Exhibit X). Agriculture is an allowed use in rural areas and activity centers, which is compatible with the agricultural practices.
WAC 365-190-050(3)(c)(viii) Intensity of nearby land uses	The majority of land in rural areas is either undeveloped or developed with single-family residences on larger parcels (Exhibit X). This intensity is compatible with agricultural uses.
WAC 365-190-050(3)(c)(ix) History of land development permits issued nearby	Based on a review of San Juan County GIS information, building, land use, and subdivision permits are more prevalent in UGAs than in the

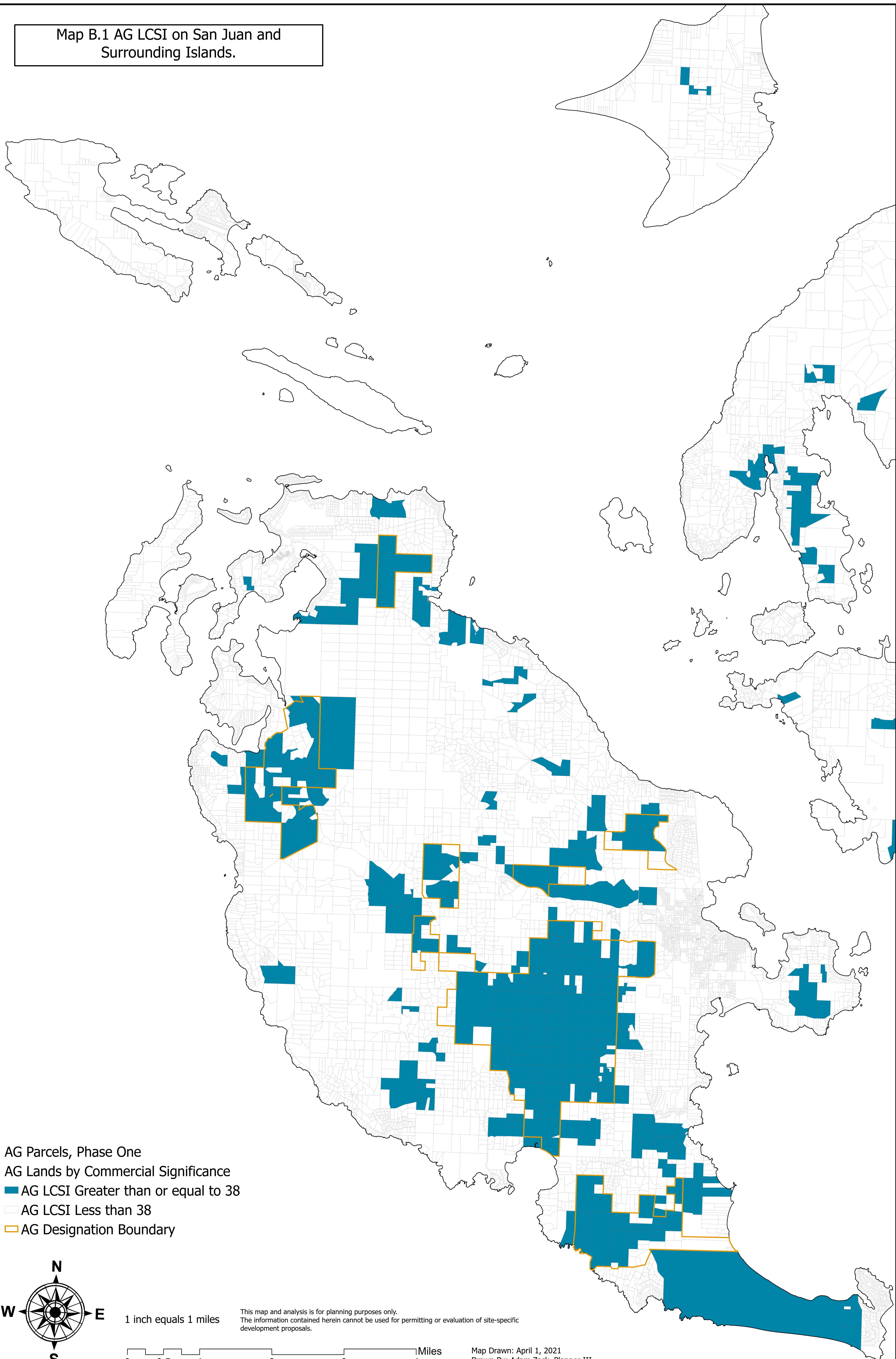
Description of Area:	TPN(s):	
	Surrounding Land Uses:	
Criteria	Area Characteristics	
	surrounding rural and natural resource areas (Exhibit X).	
WAC 365-190-050(3)(c)(x) Land values under alternative uses	Land values for non-agricultural uses are higher than for agricultural uses. This is why approximately X percent of property owners participate in the current use taxation program (Exhibit X).	
WAC 365-190-050(3)(c)(xi) Proximity to markets	This area is approximately X miles from [the nearest UGA] and [is or is not] on a ferry served island. The County road and WA State Ferry systems provide this area with access to markets for agricultural products.	

Source: Natural Resource Land Designation Review Methodology.

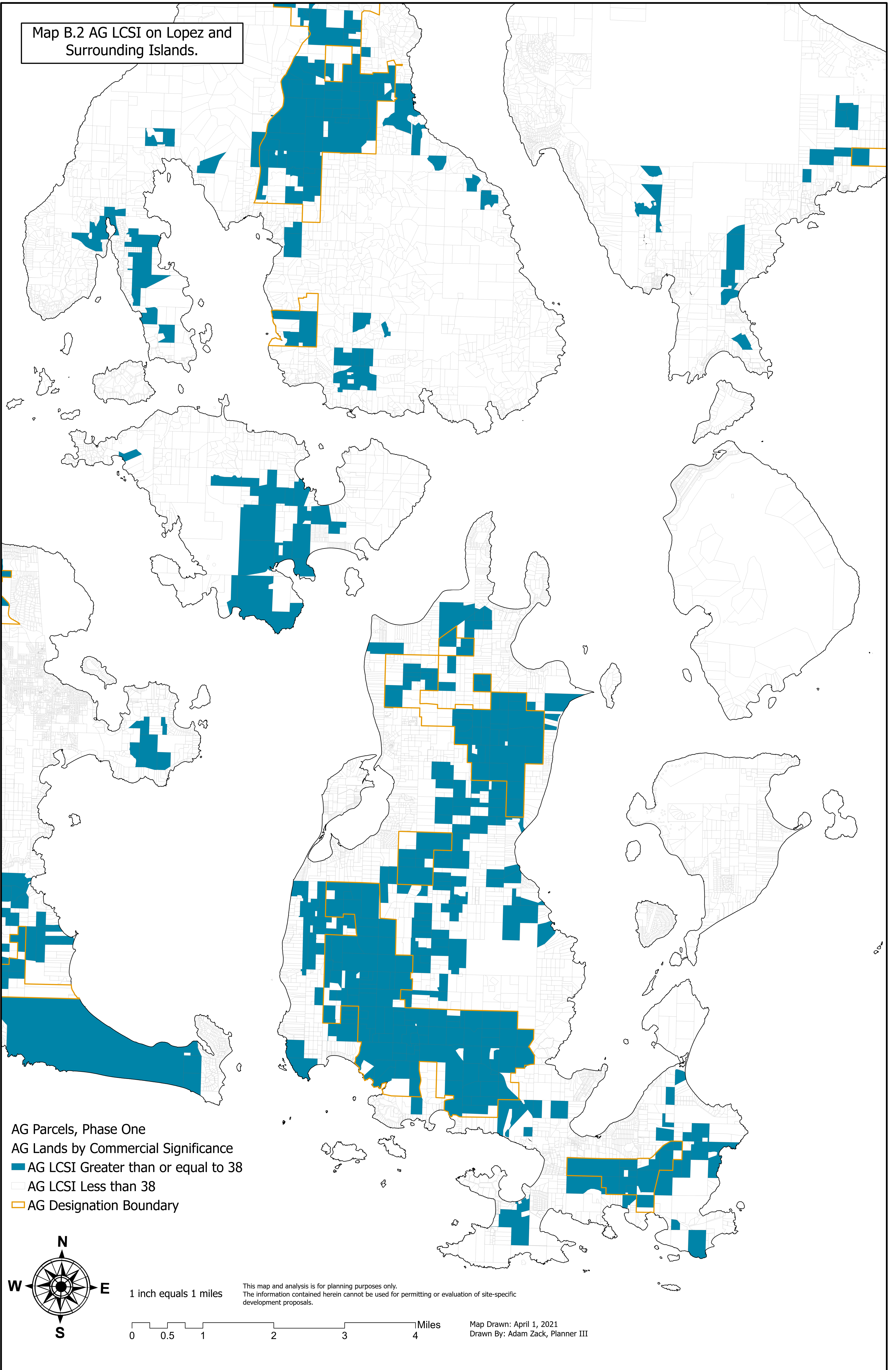
APPENDIX B

24" X 36" Maps of Phase One Results

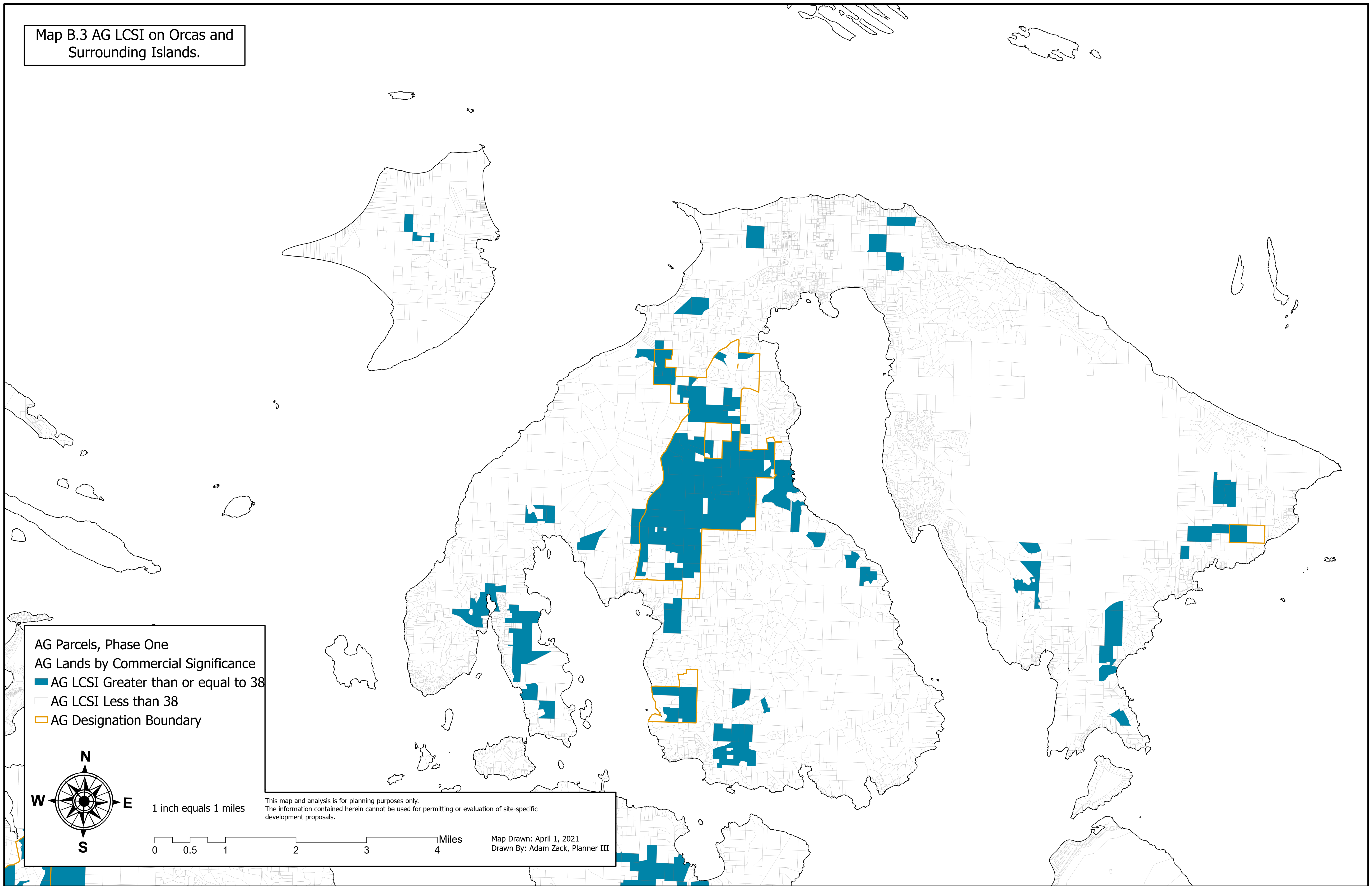
Map B.1 AG LCSI on San Juan and Surrounding Islands.



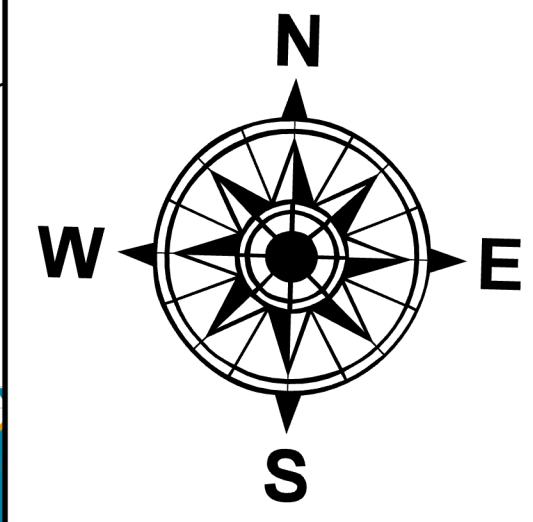
Map B.2 AG LCSI on Lopez and Surrounding Islands.



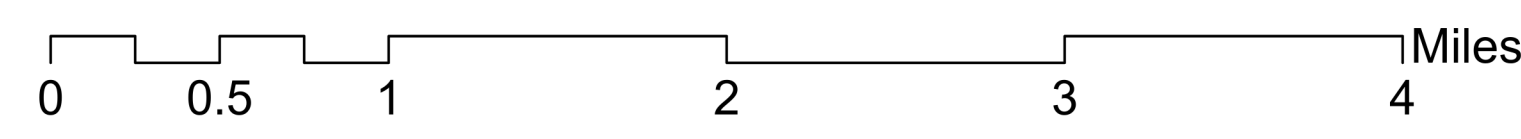
Map B.3 AG LCSI on Orcas and Surrounding Islands.



AG Parcels, Phase One
AG Lands by Commercial Significance
■ AG LCSI Greater than or equal to 38
□ AG LCSI Less than 38
□ AG Designation Boundary



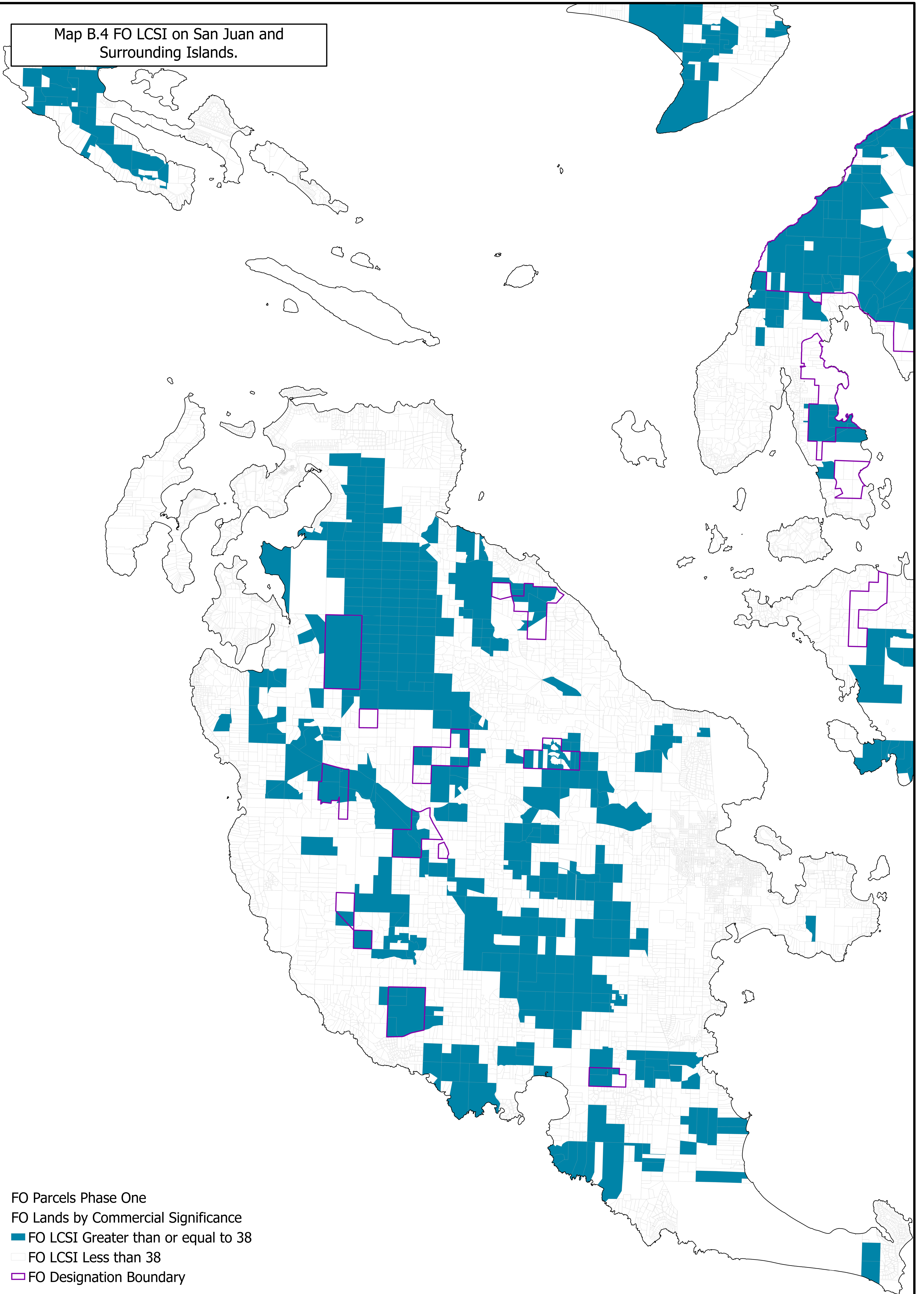
1 inch equals 1 miles



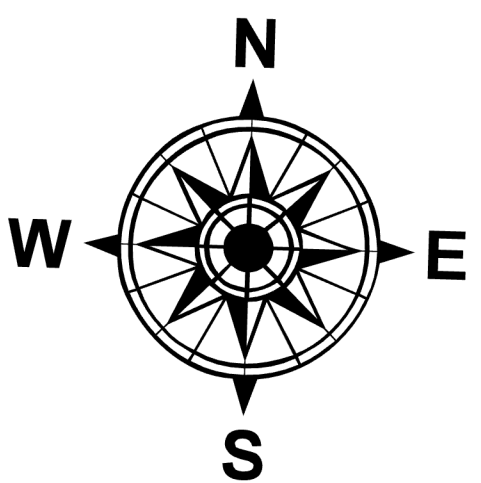
This map and analysis is for planning purposes only.
The information contained herein cannot be used for permitting or evaluation of site-specific development proposals.

Map Drawn: April 1, 2021
Drawn By: Adam Zack, Planner III

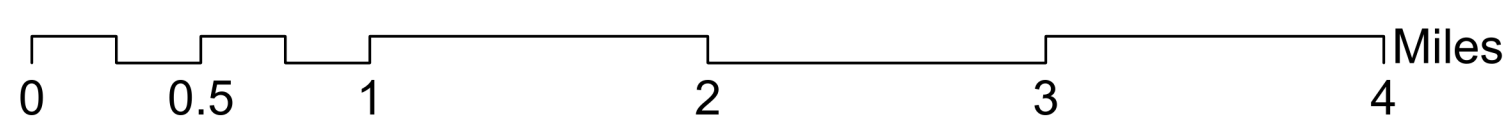
Map B.4 FO LCSI on San Juan and Surrounding Islands.



FO Parcels Phase One
FO Lands by Commercial Significance
■ FO LCSI Greater than or equal to 38
□ FO LCSI Less than 38
□ FO Designation Boundary



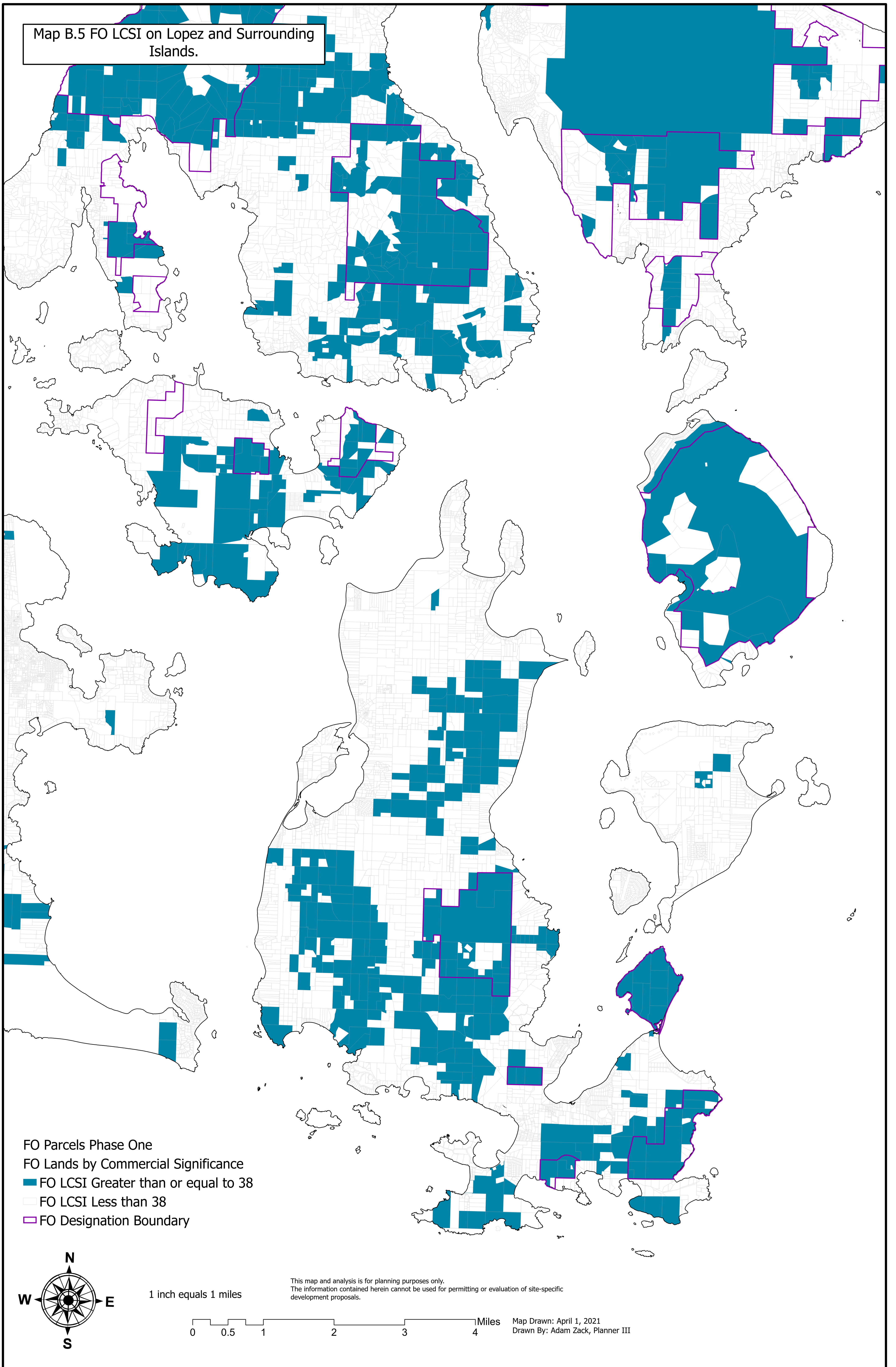
1 inch equals 1 miles



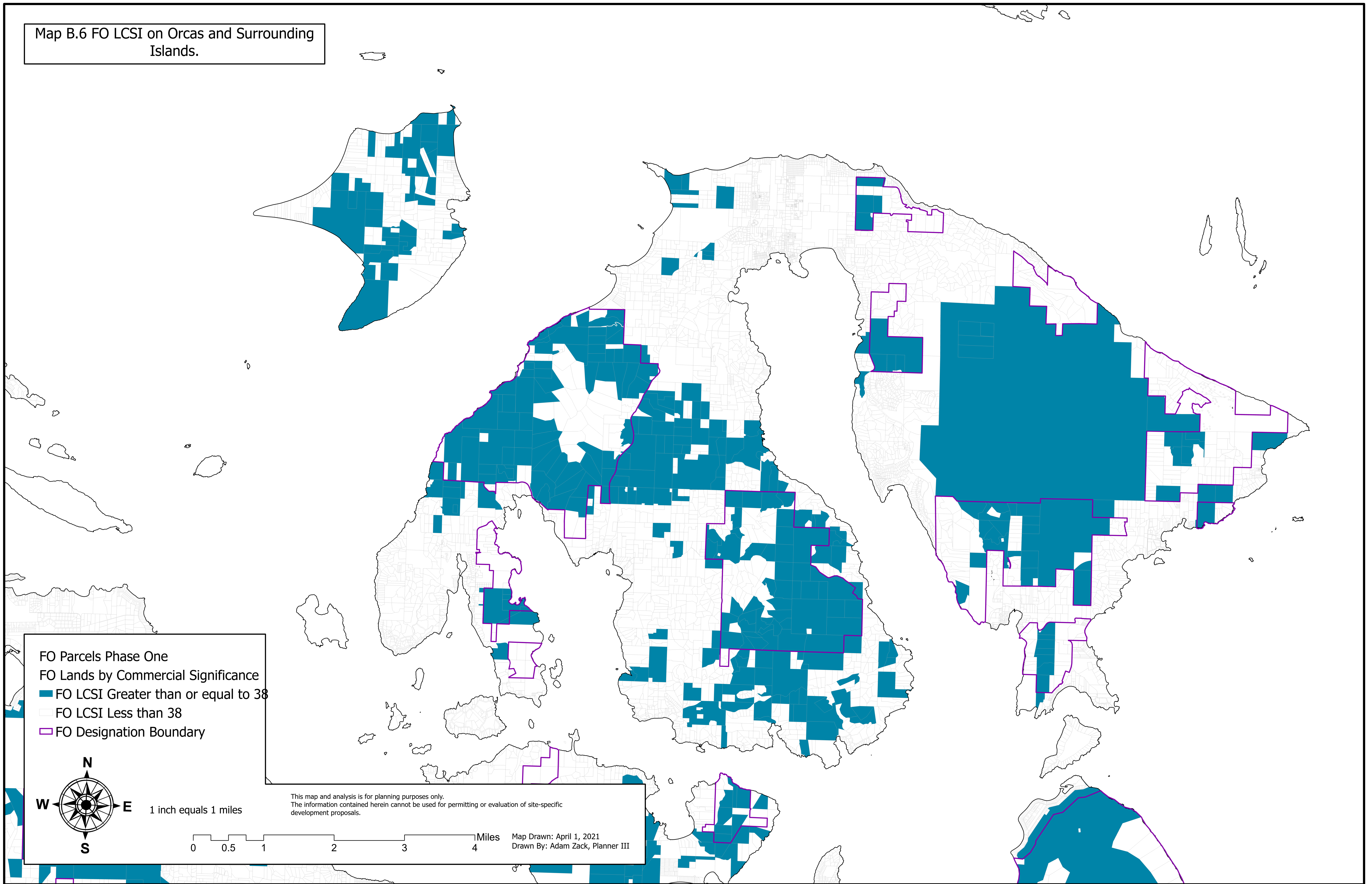
This map and analysis is for planning purposes only.
The information contained herein cannot be used for permitting or evaluation of site-specific development proposals.

Map Drawn: April 1, 2021
Drawn By: Adam Zack, Planner III

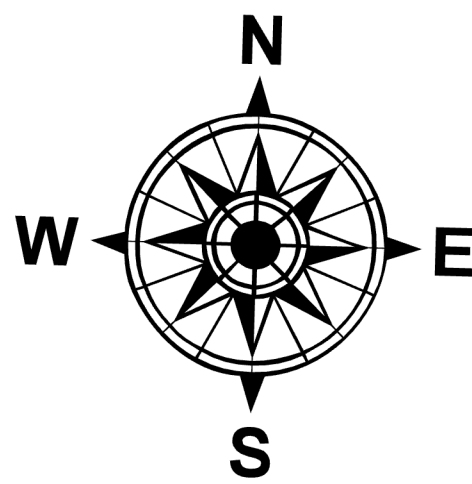
Map B.5 FO LCSI on Lopez and Surrounding Islands.



Map B.6 FO LCSI on Orcas and Surrounding Islands.



FO Parcels Phase One
FO Lands by Commercial Significance
■ FO LCSI Greater than or equal to 38
□ FO LCSI Less than 38
□ FO Designation Boundary



1 inch equals 1 miles

0 0.5 1 2 3 4 Miles

Map Drawn: April 1, 2021
Drawn By: Adam Zack, Planner III

This map and analysis is for planning purposes only.
The information contained herein cannot be used for permitting or evaluation of site-specific
development proposals.



To: SJC CD Staff, Planning Commissioners, and Council Members

From: R. Brent Lyles, Executive Director

Date: January 13, 2021

Subject: Comments on the proposed mineral resource land overlay proposed for the designation of mineral resource lands, the designation and de-designation of agricultural and forest resource lands, and the Long-Term Commercial Significance Index scoring system

Submitted via email: compplancomments@sanjuanco.com

Mineral Resource Lands

Of all the commercial operations that can occur on resource lands in SJC, mining is the most impactful to SJC's exceptional quality of life and natural environment; mining is the least compatible with all other land use designations. The proposal to confer resource land designation to legally established and existing mining operations by using the mineral resource land overlay (MRLO) as the land use designation raises questions and concerns.

1. Would the MRLO allow the existing mining operations to expand in size and/or intensity beyond that which is allowed under their current land use designation(s)?
2. Would the waiver of the currently required geologic and economic report prepared by a qualified professional set a precedent for waiving the required reports from qualified professionals for other types of land-use development?
3. In addition to SJC's outreach to existing mining operations, has SJC conducted outreach to the neighbors of the existing mining operations regarding the proposed changes to MRLO requirements?

The Natural Resource Land Designation Review Draft Methodology (Attachment D in the September 3, 2020 staff report) does not provide a Long-Term Commercial Significance Index (LCSI) scoring system or any other means of evaluating parcels for designation as mineral resource lands (by using the mineral resource land overlay (MRLO)). Parcels with agricultural and forestry operations are not being provided with the opportunity to receive resource land designation solely on the basis of having legally established and existing operations. SJC needs to address the many issues associated with designating mineral resource lands, including compatibility with existing development and land use designations, and impacts to SJC's environmental resources and rural and community character and quality of life.

Agricultural and Forest Resource Lands

Agricultural and forest resource lands provide San Juan County (SJC) with high value benefits in addition to their economic significance. There is strong public support for the complimentary values of resource lands in the health of our community and environment. Friends of the San Juans urges SJC to give more attention to these values in defining the framework for

designating and de-designating resource lands.

State law also recognizes the importance of these benefits as identified in WAC 365-190-060 (2)(c) which needs to be more thoroughly addressed in the designation of forest resource lands:

Counties and cities may also consider secondary benefits from retaining commercial forestry operations. Benefits from retaining commercial forestry may include protecting air and water quality, maintaining adequate aquifer recharge areas, reducing forest fire risks, supporting tourism and access to recreational opportunities, providing carbon sequestration benefits, and improving wildlife habitat and connectivity for upland species. These are only potential secondary benefits from retaining commercial forestry operations, and should not be used alone as a basis for designating or dedesignating forest resource lands.

The proposed revisions to the forestry policies include recreational activities and reducing forest fire risks, and they should be further revised to address all the benefits listed above.

While identical language is not expressly included for agricultural resource lands, WAC 365-190-050 (6) states:

Counties and cities may further classify additional agricultural lands of local importance. Classifying additional agricultural lands of local importance should include, in addition to general public involvement, consultation with the board of the local conservation district and the local committee of the farm service agency. It may also be useful to consult with any existing local organizations marketing or using local produce, including the boards of local farmers markets, school districts, other large institutions, such as hospitals, correctional facilities, or existing food cooperatives.

These additional lands may include designated critical areas, such as bogs used to grow cranberries or farmed wetlands. Where these lands are also designated critical areas, counties and cities planning under the act must weigh the compatibility of adjacent land uses and development with the continuing need to protect the functions and values of critical areas and ecosystems.

Agricultural lands of local importance should be identified with these benefits:

Protecting air and water quality, maintaining adequate aquifer recharge areas, reducing forest fire risks, supporting tourism, providing carbon sequestration benefits, and improving wildlife habitat and connectivity for upland species.

There is also value in having food production distributed throughout the islands, especially with regard to emergency preparedness. If there were a major disaster like an earthquake, the islands might have difficulty receiving supplies, and ferry service could be reduced or eliminated for an extended period of time.

Friends of the San Juans is concerned with the importance placed on larger parcel size in the proposed resource land designation/de-designation process. The Growth Management Act (GMA) regulations do not specify a minimum parcel size for either agricultural resource land

designation or forest resource land designation. What does SJC know about the size and scale of forest land operations and the forest products produced in SJC? In addition, SJC needs to clearly define how it will identify the appropriate amount of forest resource lands that would be sufficient to maintain and enhance the economic viability of SJC's forestry industries. The lack of data about local forestry operations and the lack of local forestry support organizations that engage in policy development is very concerning. The Washington State Department of Natural Resources' [2020 Forest Action Plan](#) could be a resource.

The size, scale and types of agricultural production in SJC are not the same as other WA State counties. 40.4% of SJC farmers who responded to a 2017 survey farmed 10 acres or less.¹ According to the most recent USDA Census of Agriculture, 1.0 to 9.9-acre farm operations in SJC increased 42% between 2007 and 2017 (as compared with a 20% increase state-wide); 72 farms averaging 5 acres in size comprise 23% of all farms in San Juan County (SJC).² GMA regulations clearly state that lands that are currently used for agricultural and/or forestry production **and** lands that are capable of such use must be evaluated for designation as resource lands (WAC 365-190-050 (2)(b)(i) and WAC 365-190-060 (2)(b)). In determining whether or not agricultural lands have long-term commercial significance "counties and cities should consider the following nonexclusive criteria, as applicable:" (WAC 365-190-050 (2)). The tax status criterion is nonexclusive and all criteria need to be evaluated for their applicability to SJC. The November 6, 2020 staff report states on page 2: "A search for parcels that had both farms on the VSP map and did not participate in the CUFA and OSFC programs brought up about 200 parcels that averaged about 20 acres in size." Presumably some of these existing farms that do not participate in the CUFA or OSFC current-use and open space agricultural tax programs are less than 10 acres. The agricultural resource lands policies as included in the 12-29-2020 draft Element B.2 Land Use and Rural could jeopardize the appropriate resource land designation or de-designation of a substantial number of agricultural parcels with long-term commercial significance.

Long-Term Commercial Significance Index scoring system

The proposed Natural Resource Land Designation Review Methodology includes a Long-Term Commercial Significance Index (LCSI) scoring system that raises significant concerns. The proposed scoring system will need to be tested and evaluated to ensure compliance with all GMA regulations and adjusted as needed.

Friends of the San Juans recommends the following:

1. Evaluate the amount of designated agricultural resource lands and forest resource

¹ Rose Krebill-Prather, *Agricultural Viability in San Juan County*, prepared for WSU Social & Economic Sciences Research Center, 36 (March 2017).

² United States Department of Agriculture (USDA) National Agricultural Statistics Service [Census of Agriculture](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_2_County_Level/Washington/st53_2_0008_0008.pdf). https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_2_County_Level/Washington/st53_2_0008_0008.pdf and https://www.nass.usda.gov/Publications/AgCensus/2012/Full_Report/Volume_1_Chapter_2_County_Level/Washington/st53_2_008_008.pdf

lands that would be sufficient to maintain and enhance the economic viability of SJC's agricultural and forestry industries by complying with both WAC 365-190-050 (5) and WAC 365-190-060 (5). Ensure that the results of the LCSI scoring system are consistent with these sections of the WAC:

- WAC 365-190-050 (5) When applying the criteria in subsection (3)(c) of this section, the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term; and to retain supporting agricultural businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities.
 - WAC 365-190-060 (5) When applying the criteria in subsection (4) of this section, counties or cities should designate at least the minimum amount of forest resource lands needed to maintain economic viability for the forestry industry and to retain supporting forestry businesses, such as loggers, mills, forest product processors, equipment suppliers, and equipment maintenance and repair facilities. Economic viability in this context is that amount of designated forestry resource land needed to maintain economic viability of the forestry industry in the region over the long term.
2. Provide the additional data needed to identify resource lands of long-term commercial significance.
 - a. The County proposes to use the following sources of data:
 - SJC Comp Plan maps—land use designations;
 - SJC parcel data from the Assessor—parcel size, etc.;
 - SJC Assessor's Tax Map—enrollment in current use tax designations;
 - U.S. Department of Agriculture Natural Resource Conservation Service Soil Maps—soil suitability for agricultural production;
 - Washington Department of Natural Resources Private Forest Land Grade maps—location and extent of forest soils; and
 - SJC Voluntary Stewardship Program maps—location and type of agriculture.
 - b. This list should be supplemented with historic farming and forestry data, as well as information about parcels with current forestry operations, including those parcels that aren't currently enrolled in a forestry tax designation program.
 3. Explain the criteria used to initially identify resource lands and compare that with the LCSI and proposed criteria, including an explanation for why agricultural resource lands are currently only on San Juan, Orcas, and Lopez islands. The LCSI could perpetuate this land use designation bias in that it assigns lower scores to lands with long-term commercial significance that are located on Shaw Island and non-ferry served islands.
 4. Provide a clear explanation for the LCSI's different factor scores and the varying weights of the factor scores as applied to the subsections of WAC 365-190-050 (3)(c) and WAC 365-190-060 (4); furthermore, explain why the different factor scores and the varying weights of the factor scores are used when there is no priority or other relative value given to these subsections in the WAC. Arbitrary factor scores and score weights could

result in false distinctions between parcels that have similar long-term commercial significance.

5. Explain how the subsections of WAC 365-190-050 (3)(c) and WAC 365-190-060 (4) are applicable to the determination of long-term commercial significance of resource lands specifically in SJC.
6. Clearly define what, if any, SJC land use designations would be incompatible with agriculture and/or forest resource lands, and explain why.

Additional comments are embedded below in each of the criterion identified for the evaluation of parcels as resource lands in the Agricultural LCS, Table 1 (starting on page 7 of the Natural Resource Land Designation Review Draft Methodology):

WAC 365-190-050 (3)(c) “The land has long-term commercial significance for agriculture. In determining this factor, counties and cities should consider the following nonexclusive criteria, as applicable:”

Criterion 1		
Comments: This criterion does not address WAC 365-190-050 (3)(b) “The land is used or capable of being used for agricultural production. This factor evaluates whether lands are well suited to agricultural use based primarily on their physical and geographic characteristics. Some agricultural operations are less dependent on soil quality than others, including some livestock production operations.”	Criterion	The classification of prime and unique farmland soils as mapped by the NRCS (WAC 365-190-050(3)(c)(i))
	Weight	X2
	Factor Scores	
	4	If more than 75% of parcel is prime farmland
	3	If between 50 and 75% of parcel is prime farmland
	2	If between 25 and 50% of parcel is prime farmland
1	If between 1 and 25% of parcel is prime farmland	
0	If no prime farmlands	

Criterion 2		
Comments: There is no explanation for treating parcels in the San Juans differently based on their distance from a public road or for awarding different scores based on “adjacency” or a 1,000-foot threshold. How important is access to public roads vs. private roads in SJC (given the type of public roads as compared with private roads and the scale and type of ag operations)?	Criterion	The availability of public facilities, including roads used in transporting agricultural products (WAC 365-190-050(3)(c)(ii))
	Weight	X1
	Factor Scores	
	4	If adjacent to public road
	2	If within 1,000 feet of a public road
0	If more than 1,000 feet from a public road	

Criterion 3		
Comments: Nov. 6, 2020 staff report (pg. 2): “A search for parcels that had	Criterion	Tax status, including whether lands are enrolled under the current use tax assessment. (WAC 365-190-050(3)(c)(iii))

<p>both farms on the VSP map and did not participate in the CUFA and OSFC programs brought up about 200 parcels that averaged about 20 acres in size.”</p> <p>WAC 365-190-050 states: “Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW” which doesn’t differentiate between lands that are currently used for agricultural production and lands that are capable of such use. The factor scores should be the same for both the current use and conservation programs.</p>	Weight	X1.5
	Factor Scores	
	4	If parcel in the current use farm and agriculture program
	3	If parcel in open-space farm conservation program
	0	If not in the current-use farm and agriculture or open-space farm conservation programs

Criterion 4		
<p>Comments: This criterion appears to penalize parcels that have long-term commercial significance if they have access to community water and sewer services (whether or not these community systems would be used for agricultural operations). The WAC does not specify whether the “availability of public services” is a benefit or a detriment to long-term commercial significance. Agricultural processing that requires regular testing of the water would benefit from a community water system.</p>	Criterion	The availability of public services (WAC 365-190-050(3)(c)(iv))
	Weight	X1
	Factor Scores	
	4	If outside a community water system and sewer system service area
	2	If within a community water system service area and outside a sewer system service area
	0	If within a community water system and sewer system service area

Criterion 5		
<p>Comments: WAC 365-190-050(3)(c)(v) doesn’t specify whether a parcel’s relationship or proximity to urban growth areas is a benefit or a detriment. Is the staff correct in stating that parcels with long-term commercial significance that are near UGAs will face additional pressure to develop with incompatible uses? Or is proximity to a UGA a benefit in terms of access to markets (e.g., see criterion 9 below)? It would be appropriate to exclude parcels from agricultural designation based on WAC 365-190-050(3)(a) “The land is not already characterized by urban growth. To evaluate this factor,</p>	Criterion	Relationship or proximity to urban growth areas (WAC 365-190-050(3)(c)(v))
	Weight	X1
	Factor Scores	
	4	If more than one-half mile away from a UGA
	2	If between one half and one quarter mile of a UGA
	0	If closer than one quarter mile or within a UGA

counties and cities should use the criteria contained in WAC 365-196-310 .”		
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Criterion 6		
<p>Comments: GMA regulations do not establish a minimum parcel size for natural resource land designations. SJC could identify different parcel sizes that are adequate for long-term commercial significance for different types of farming. Also, is the scoring difference appropriate, for commercial purposes, between a 1.99-acre parcel and a 5.01-acre parcel? 5.01 acres is worth 4 points (2X2) and 1.99 acres = 0. How will parcels that are exactly 2 or 5 or 10 or 20 acres be scored for this criterion? Suggested revision: If parcel is 20 acres or larger If parcel is 10 acres to 19.99 acres Etc.</p>	Criterion	Predominant parcel size (WAC 365-190-050(3)(c)(vi))
	Weight	X2
	Factor Scores	
	4	If parcel larger than 20 acres
	3	If parcel larger than 10 and less than 20 acres
	2	If parcel larger than 5 and less than 10 acres
	1	If parcel larger than 2 and less than 5 acres
0	If parcel less than 2 acres	

Criterion 7		
<p>Comments: How does the size of adjacent parcels determine compatibility with and/or designation of agricultural resource land? This criterion assumes that smaller surrounding parcels are less compatible with parcels that have long-term commercial significance for agriculture and that parcels less than 2 acres would have no compatibility. The WAC does not specify what parcel sizes would constitute a land use settlement pattern that would or would not be compatible with agricultural practices and no SJC-based analysis has been provided for the scoring of this criterion. In addition, the consideration of the compatibility of different land use designations need to be done at a macro scale and not a parcel-by-parcel scale.</p>	Criterion	Land use settlement patterns and their compatibility with agricultural practices (WAC 365-190-050(3)(c)(vii))
	Weight	X1.25
	Factor Scores	
	4	If average adjacent parcel size is 20 acres or larger
	3	If average adjacent parcel size is larger than 10 and less than 20 acres
	2	If average adjacent parcel size is larger than 5 and less than 10 acres
	1	If the average adjacent parcel size is larger than 2 and less than 5 acres
0	If the average adjacent parcel size is less than 2 acres	

Criterion 8		
<p>Comments: This criterion assumes that single-family residential development is an applicable “intensity of nearby land uses” that should be a criterion for identifying parcels that have long-term commercial significance for agriculture. The LCSJ needs to clearly define what, if any, SJC land use designations would be incompatible</p>	Criterion	Intensity of nearby land uses (WAC 365-190-050(3)(c)(viii))
	Weight	X1.25
	Factor Scores	
	4	If any neighboring parcel has AG or open space Assessor’s use code
2	If any neighboring parcel has a single-family residential use code and no neighboring parcel has an AG or open space Assessor’s use code	

with agricultural resource lands.	0	If no neighboring parcel has the use codes listed above.
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Criterion 9		
Comments: It appears that proximity to markets is being defined by a combination of ferry service and islands with UGAs. In addition to on-island direct-to-customer sales of all products, any island with access to USPS and/or UPS and/or FedEx has equal access to markets for many products.	Criterion	Proximity to markets (WAC 365-190-050(3)(c)(xi))
	Weight	X1.5
	Factor Scores	
	4	If on San Juan, Lopez, or Orcas Islands
	3	If on Shaw Island
	1	If on Stuart, Waldron, Blakely, or Decatur Islands
0	If on any other island	

Additional comments are embedded below in each of the criterion identified for the evaluation of parcels as resource lands in the Forest Resource Land LCSI, Table 3 (starting on page 10 of the Natural Resource Land Designation Review Draft Methodology):

WAC 365-190-060 (4) “Counties and cities must also consider the effects of proximity to population areas and the possibility of more intense uses of the land as indicated by the following criteria as applicable:”

Criterion 1		
Comments: This criterion appears to penalize parcels that have long-term commercial significance if they have access to community water and sewer services (whether or not these community systems would be used for forestry operations).	Criterion	The availability of public services and facilities conducive to the conversion of forest land. (WAC 365-190-060(4)(a))
	Weight	X1.5
	Factor Scores	
	4	If outside a community water system and sewer system service area
	2	If within a community water system service area and outside a sewer system service area
	0	If within a community water system and sewer system service area

Criterion 2		
Comments: How does the proximity to SJC UGAs determine compatibility with and/or designation of forest resource lands?	Criterion	The proximity of forest land to urban and suburban areas and rural settlements. (WAC 365-190-060(4)(b))
	Weight	X1.5
	Factor Scores	
	4	If more than one-half mile away from an UGA, activity center, or LAMIRD
	2	If between one half and one quarter mile of an UGA, activity center, or LAMIRD
	0	If within an UGA, activity center, or LAMIRD

Criterion 3		
<p>Comments: GMA regulations do not establish a minimum parcel size for natural resource land designations.</p> <p>How will parcels that are exactly 5 or 10 or 15 or 20 acres be scored for this criterion?</p> <p>Suggested revision:</p> <p>If parcel is 20 acres or larger</p> <p>If parcel is 15 acres to 19.99 acres</p> <p>If parcel is 10 acres to 14.99 acres</p> <p>Etc.</p>	Criterion	The size of the parcels. (WAC 365-190-060(4)(c))
	Weight	X2
	Factor Scores	
	4	If parcel larger than 20 acres
	3	If parcel larger than 15 and less than 20 acres
	2	If parcel larger than 10 and less than 15 acres
	1	If parcel larger than 5 and less than 10 acres
0	If parcel less than 5 acres	

Criterion 4		
<p>Comments: How does the size of adjacent parcels determine compatibility with and/or designation of forest resource land? The WAC does not specify what parcel sizes would constitute a land use settlement pattern that would or would not be compatible with forestry operations and no SJC-based analysis has been provided for the scoring of this criterion. In addition, the consideration of the compatibility of different land use designations needs to be done at a macro scale and not parcel-by-parcel.</p>	Criterion	The compatibility and intensity of adjacent and nearby land use and settlement patterns with forest lands. (WAC 365-190-060(4)(d))
	Weight	X1.25
	Factor Scores	
	4	If average adjacent parcel size is 20 acres or larger
	3	If average adjacent parcel size is larger than 10 and less than 20 acres
	2	If average adjacent parcel size is larger than 5 and less than 10 acres
	1	If the average adjacent parcel size is larger than 2 and less than 5 acres
0	If the average adjacent parcel size is less than 2 acres	

Criterion 5		
<p>Comments: Why are there different factor scores for the current use taxation programs?</p>	Criterion	Property tax classification. (WAC 365-190-060(4)(e))
	Weight	X2
	Factor Scores	
	4	If parcel in the designated forestland (DFL) tax program
	3	If parcel is in the open-space timber land tax program
	0	If not in the DFL or open-space timber land tax program

Criterion 6		
<p>Comments: Identifying what is needed for the viability of commercial production on forest resource lands requires much more than the consideration of access to markets with what appears to be defined as ferry</p>	Criterion	Local economic conditions which affect the ability to manage timberlands for long-term commercial production [interpreted as access to markets] (WAC 365-190-060(4)(f))
	Weight	X1
	Factor Scores	
	4	If on San Juan, Lopez, Shaw, or Orcas Islands
	3	If on Stuart, Waldron, Blakely, or Decatur Islands
	0	If on any other island

service.		
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Criterion 7		
Comments: How would commercial or industrial land uses in SJC be incompatible with commercial forest land? No SJC-based analysis has been provided for the scoring of this criterion.	Criterion	History of land development permits issued nearby (WAC 365-190-060(4)(g))
	Weight	X1.25
	Factor Scores	
	4	If any neighboring parcel has forestry or open space Assessor's use code
	2	If any neighboring parcel has a single-family residential or undeveloped use code and no neighboring parcel has a forestry or open space Assessor's use code
	0	If any neighboring parcel has a commercial, industrial, or multi-family use code

Criterion 8		
Comments: Does PFLG address all forestry operations in SJC and, if not, are these factor scores and weight appropriate?	Criterion	Private Forest Land Grade (PFLG) (WAC 365-190-060(2)(c))
	Weight	X2
	Factor Scores	
	4	If any part of the parcel has PFLG 1
	3	If any part of the parcel has PFLG 2
	2	If any part of the parcel has PFLG 3
	1	If any part of the parcel has PFLG 4
	0	If PFLG is blank or 0

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.

President & CEO

Chris Mefford

Project Manager

Elliot Weiss, AICP

Analysts

Spencer Cohen, PhD

Doudou Feng

Kristina Gallant

Mark Goodman

Community Attributes Inc.

1411 Fourth Ave, Suite 1401

Seattle, Washington 98101

www.communityattributes.com

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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**.

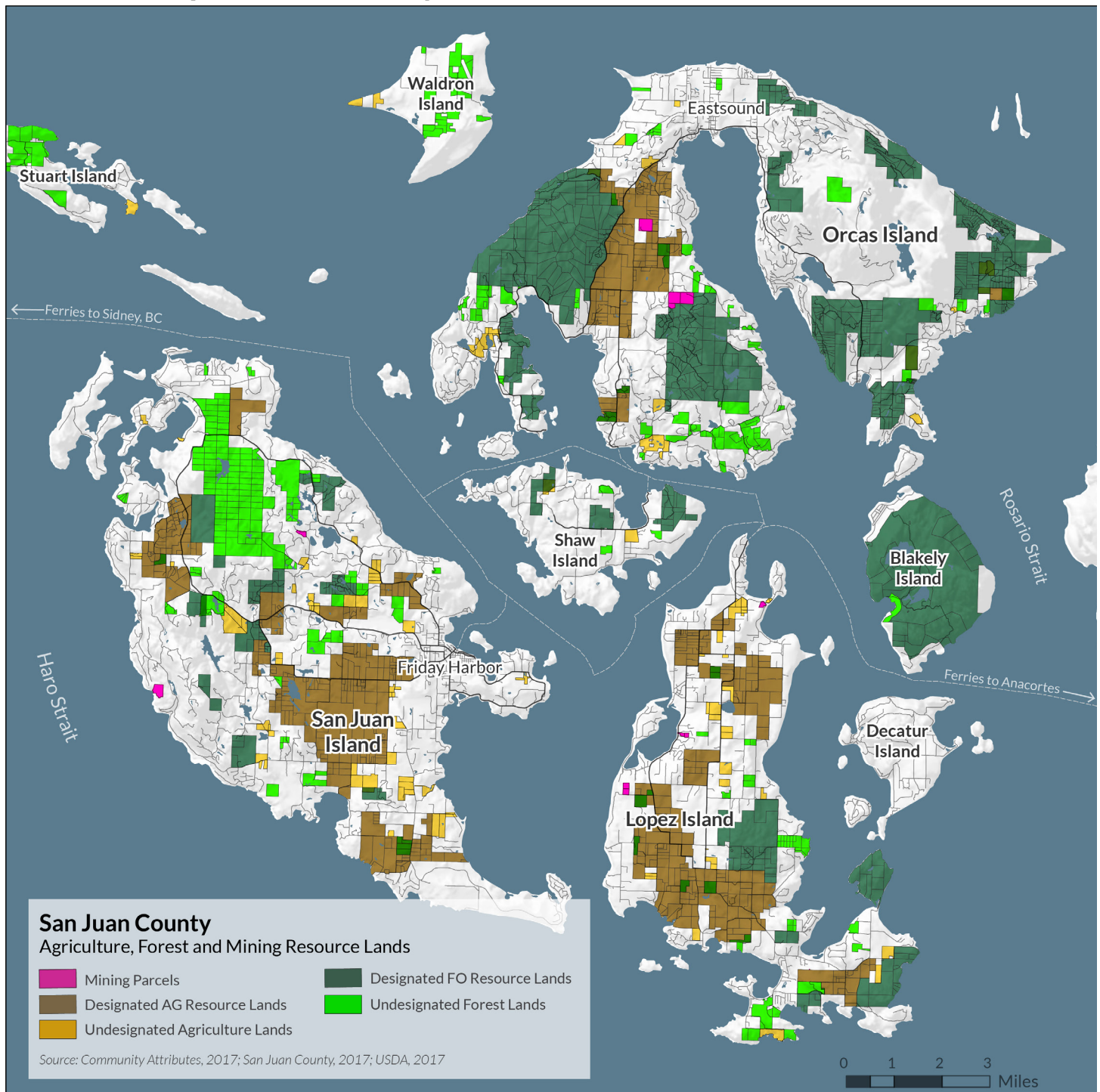
The San Juan County Comprehensive Plan does not currently have a designation for mining resource lands. There are seven active surface mining permits in San Juan County, and about 215 acres of land in use for mining.

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.

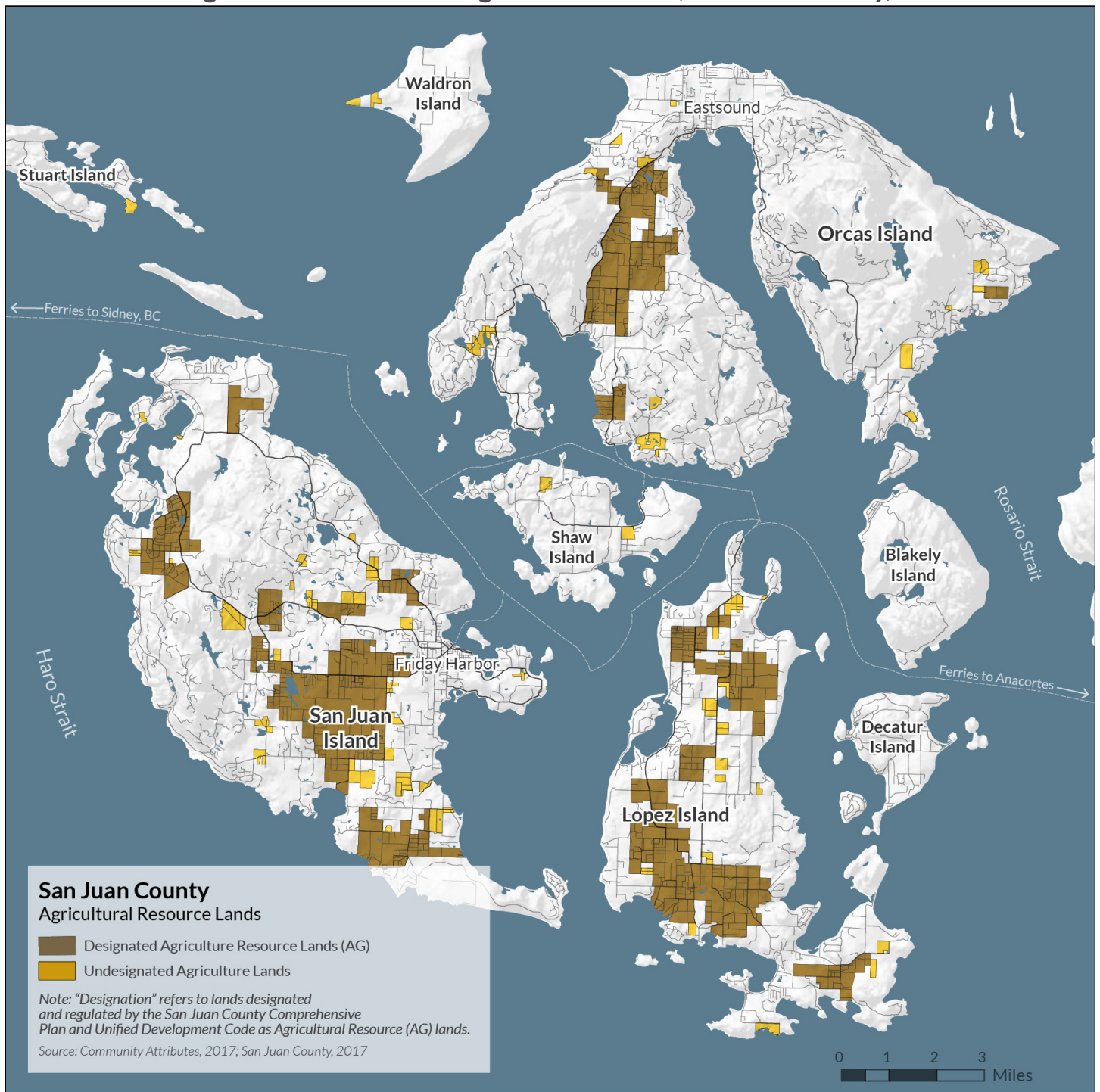
- **07-2-0027 - John Karpinski, Clark County Natural Resources Council and Futurewise v. Clark County**

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.

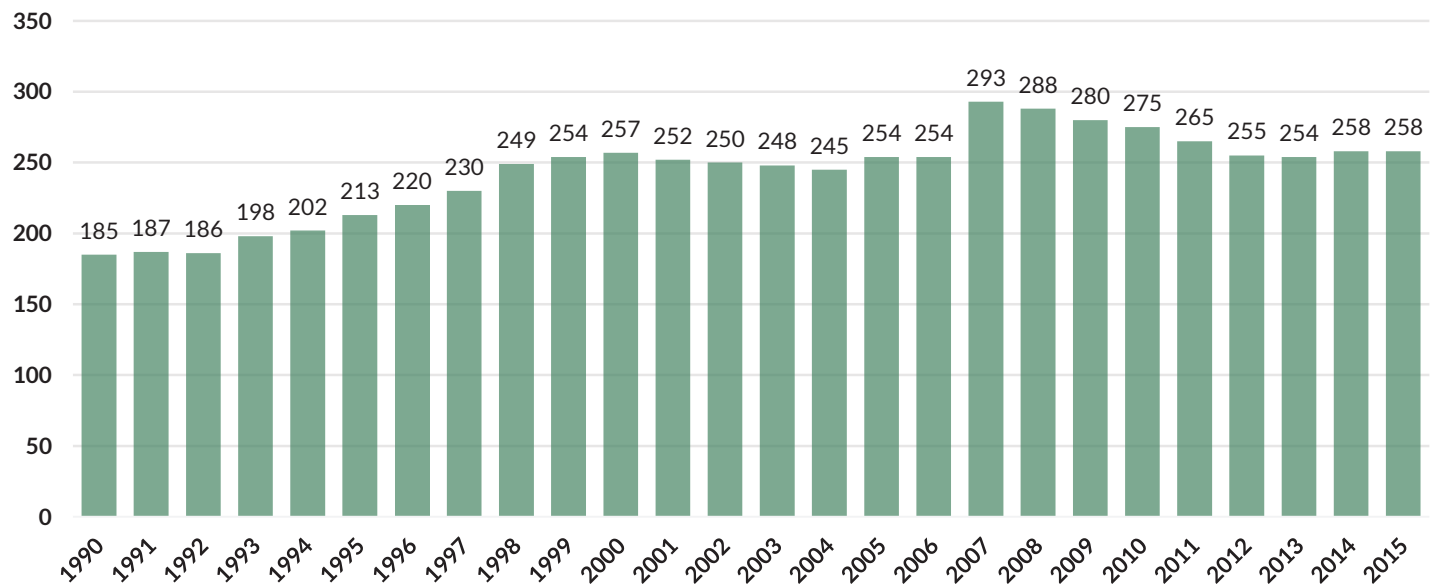
LEADING EMPLOYERS AND ACTIVITIES

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.

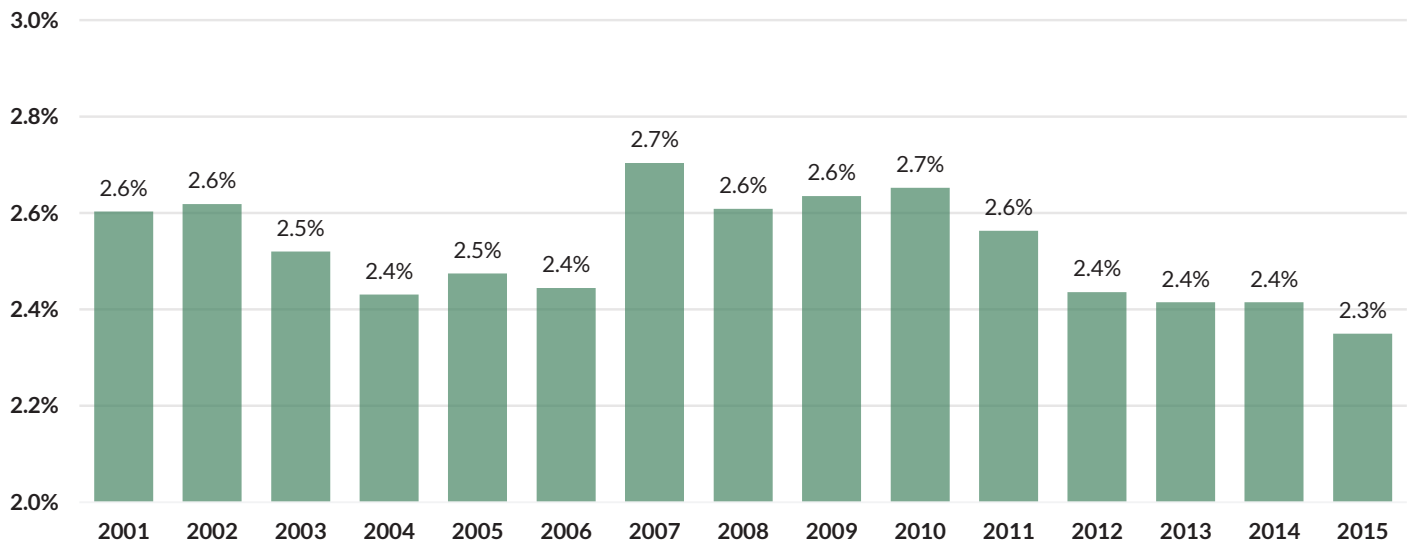
San Juan County is home to the first USDA-approved mobile processing unit on the West Coast (established in 2002). The mobile unit has helped livestock producers overcome regulatory barriers, expand product offerings and increase sales. This type of innovation and value-added effort offers a model for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

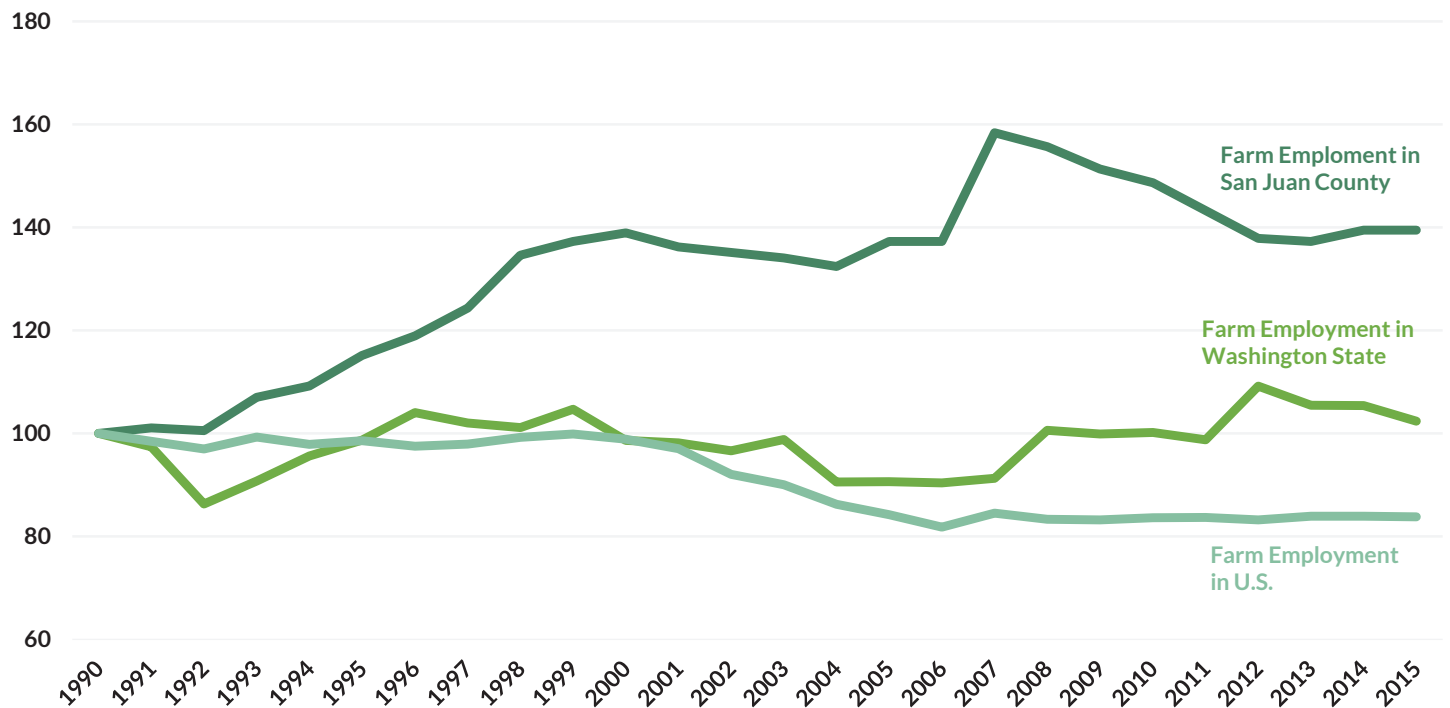
Exhibit A3. Agriculture Share of Total Employment, San Juan County, 2001-2015



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



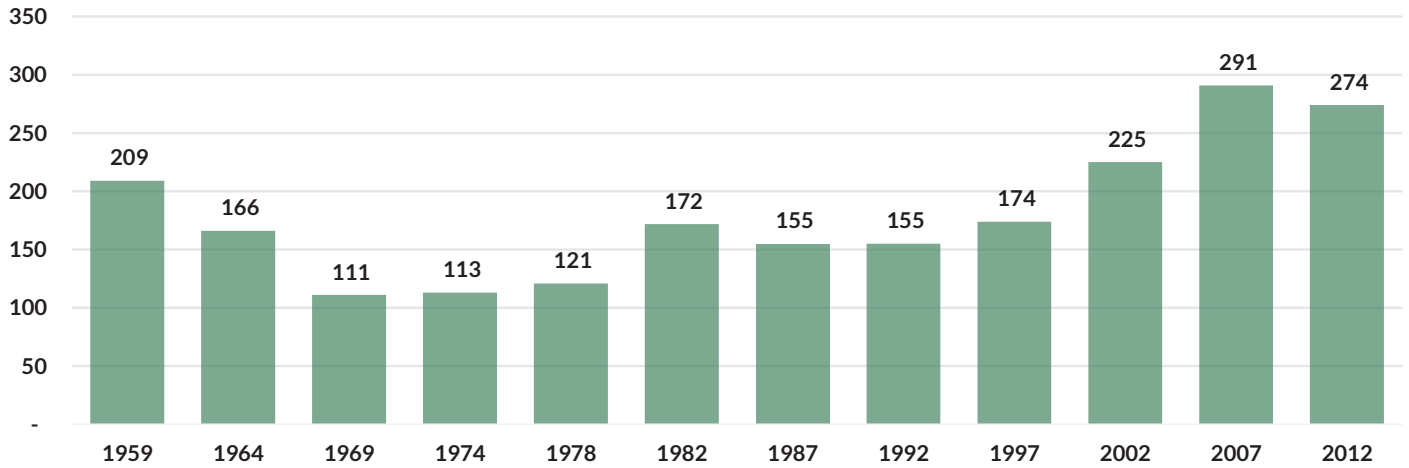
Sources: U.S. Bureau of Economic Analysis, 2017; Community Attributes Inc., 2017.

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

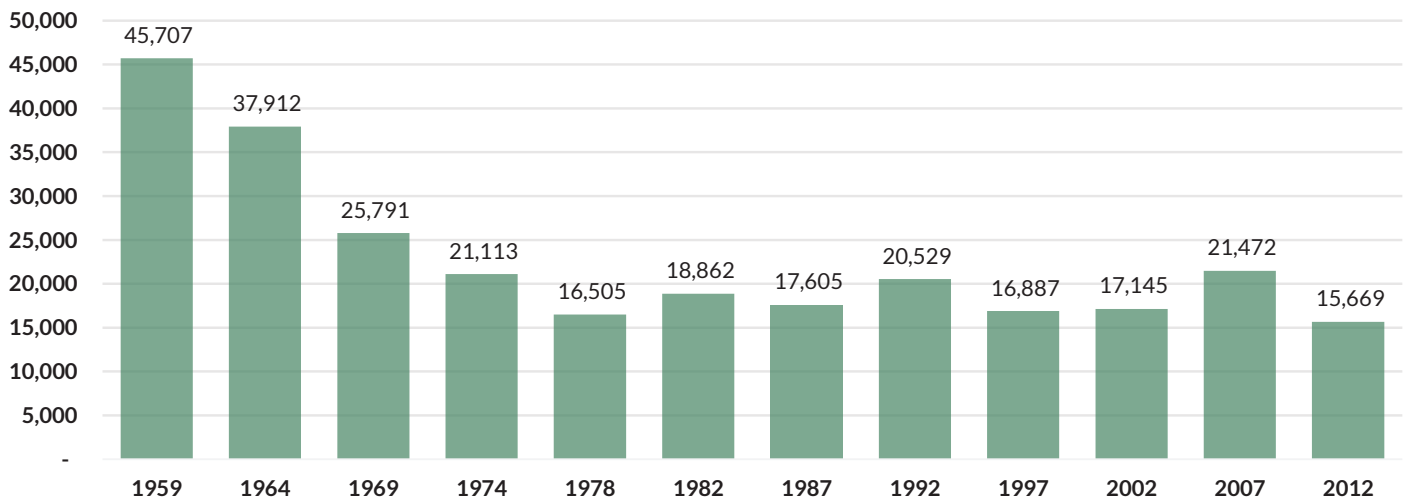


Sources: United States Department of Agriculture, 2017; Community Attributes Inc., 2017.

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

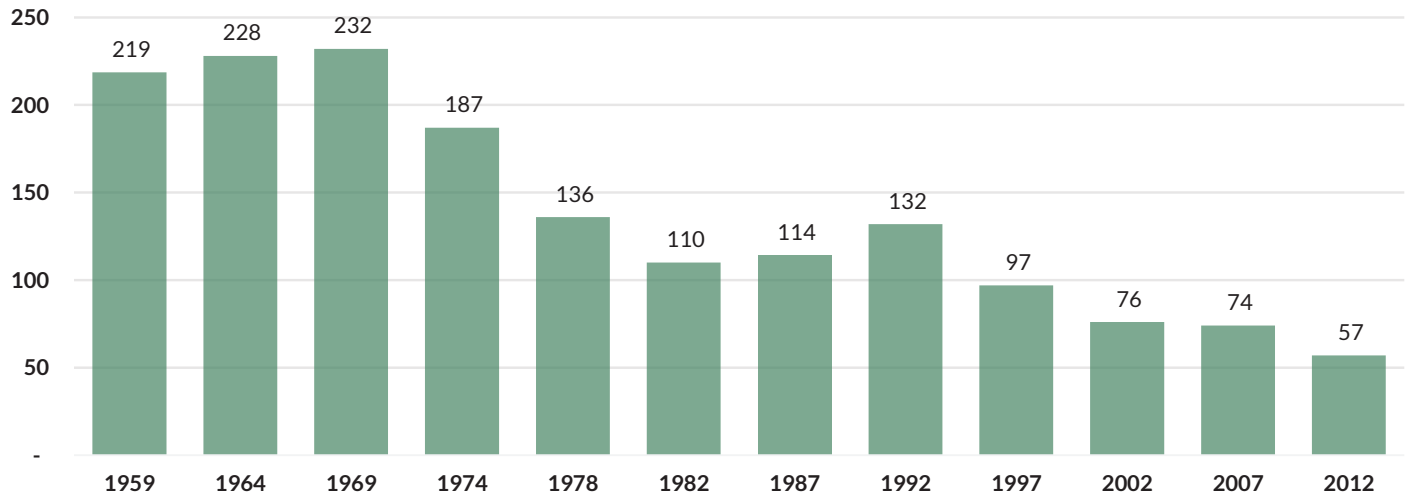


Sources: United States Department of Agriculture, 2017; Community Attributes Inc., 2017.

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.

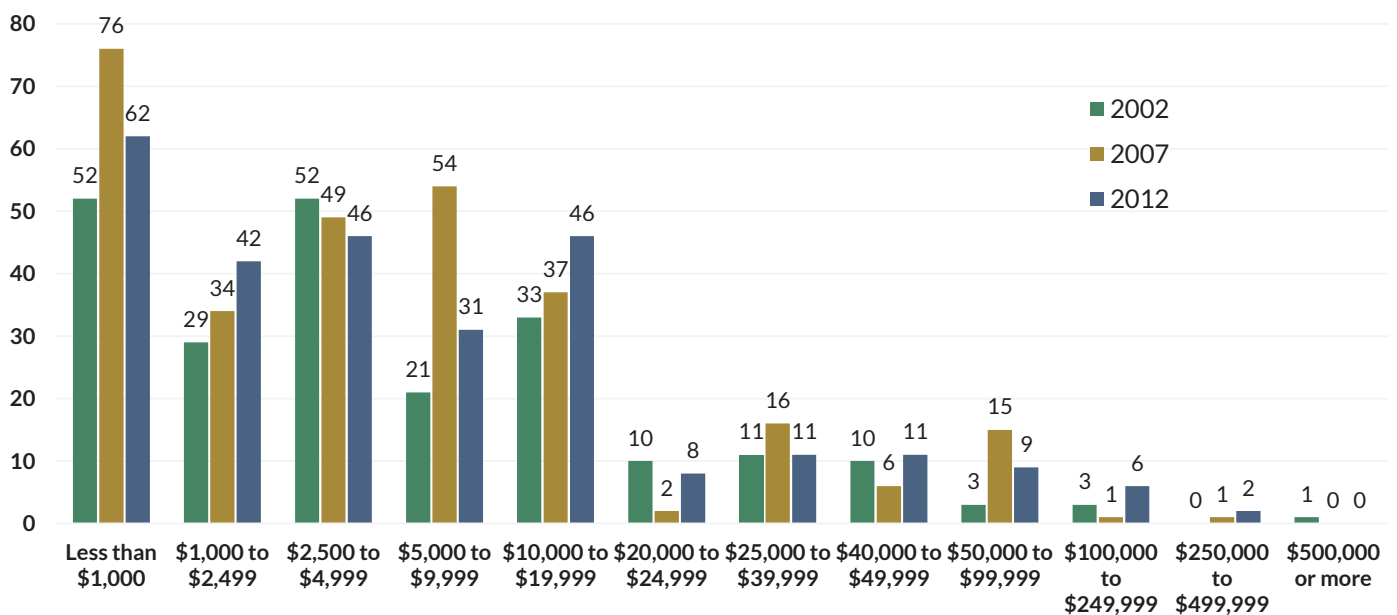
More than 80% of operating farms generated sales of less than \$20,000 a year. According to the 2012 U.S. Agriculture Census, there were only two farms that earned between \$250,000 and \$500,000 in sales in San Juan County, and none above this level (**Exhibit A8**).

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)

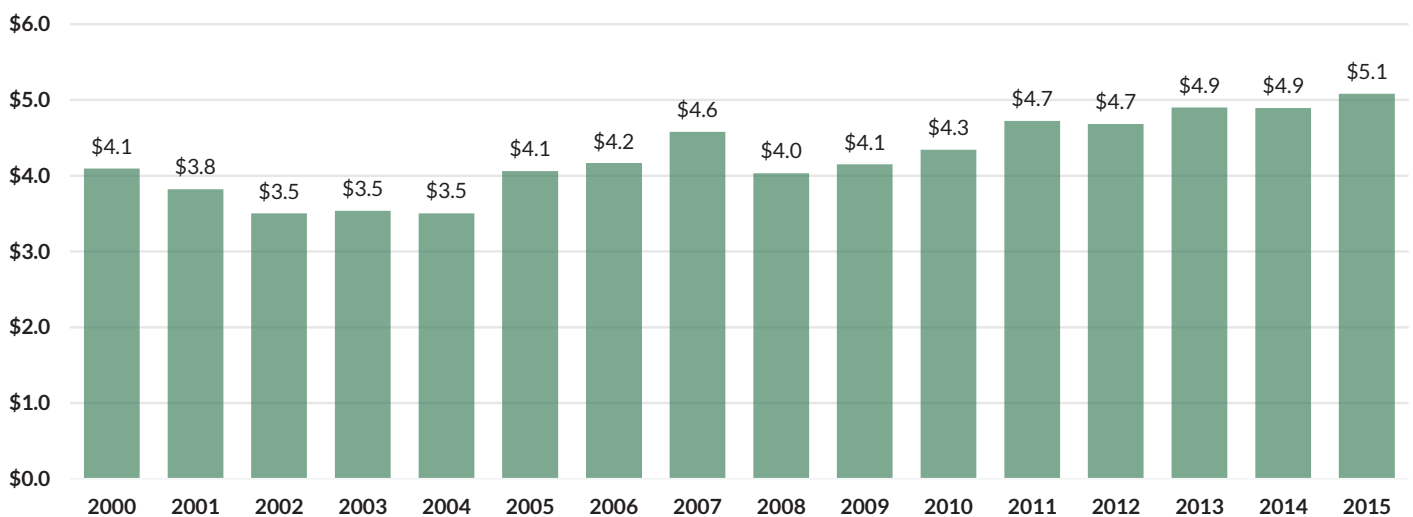


Sources: U.S. Bureau of Economic Analysis, 2017; U.S. Federal Reserve Bank of St. Louis, 2017; Community Attributes Inc., 2017.

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

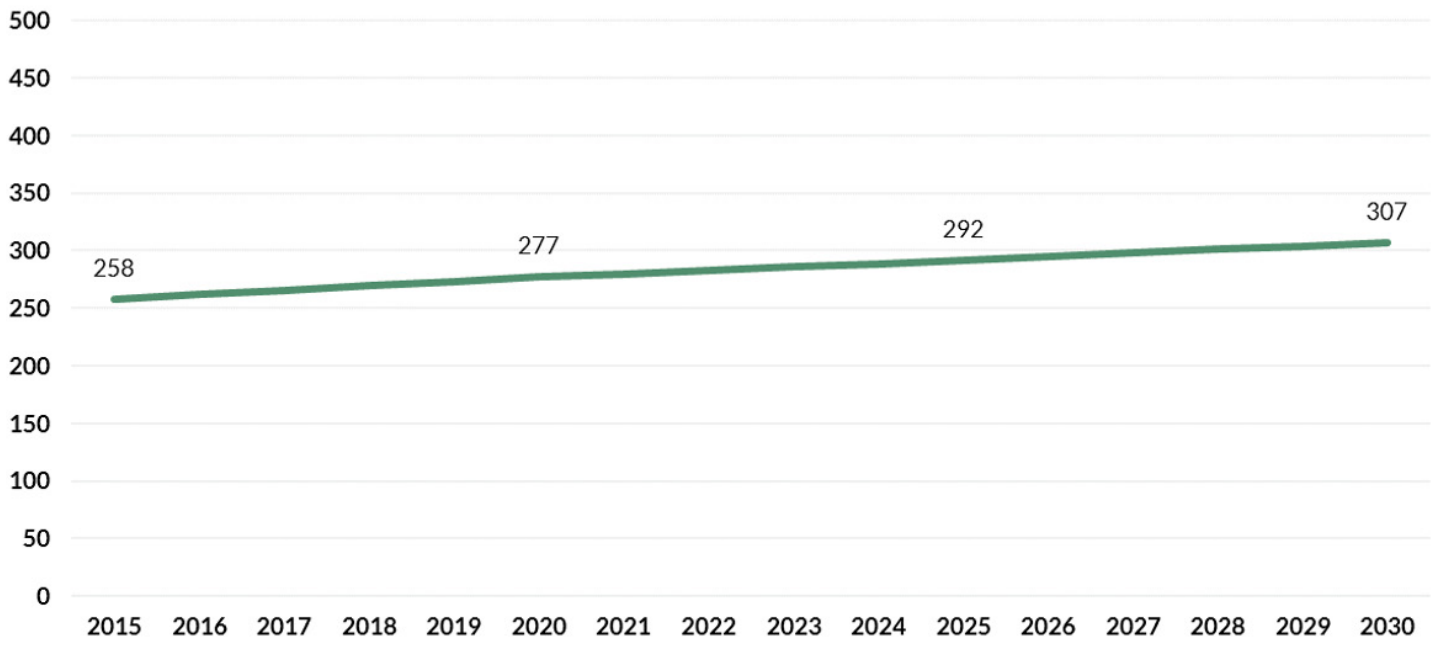
Economic viability for agriculture in San Juan County takes into consideration how the industry compares against a normalized benchmark, in this case Washington State. The metrics below assess San Juan County's agriculture's performance across the following categories:

- 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:

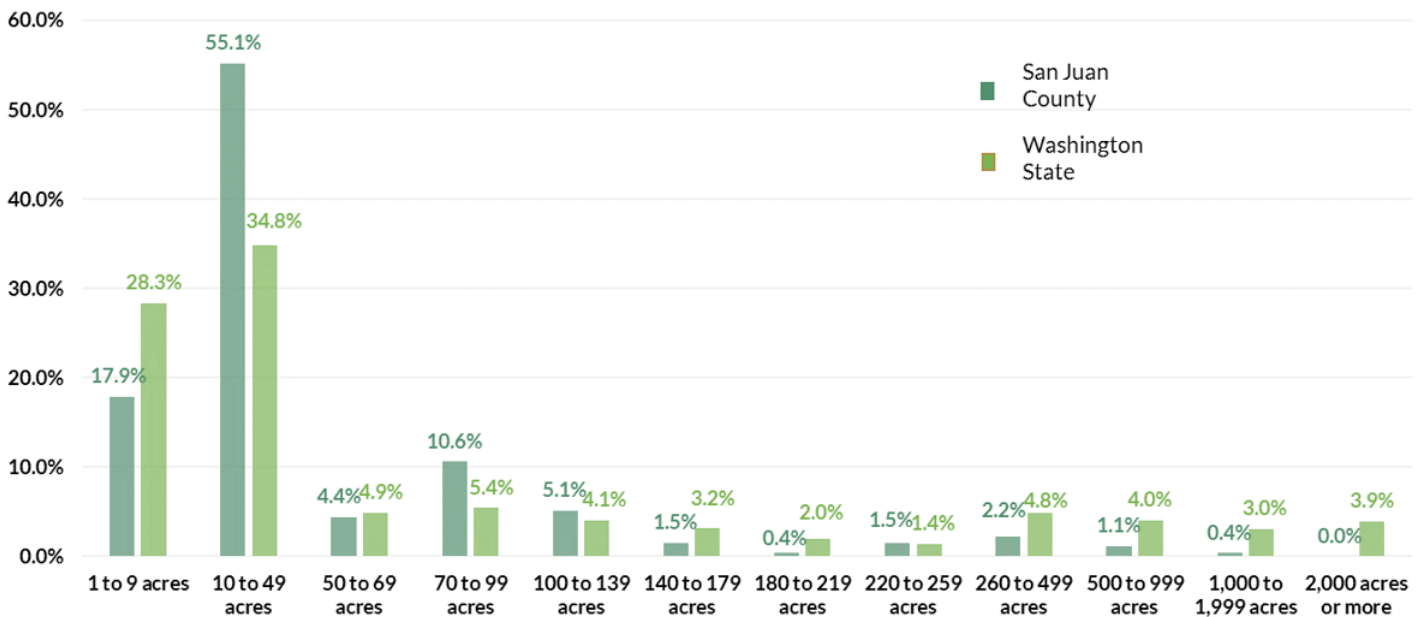
- Nursery, greenhouse, floriculture and sod
- Hogs and pigs
- Sheep, goats, wool, mohair and milk
- Horses, ponies, mules, burros and donkeys
- Aquaculture

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

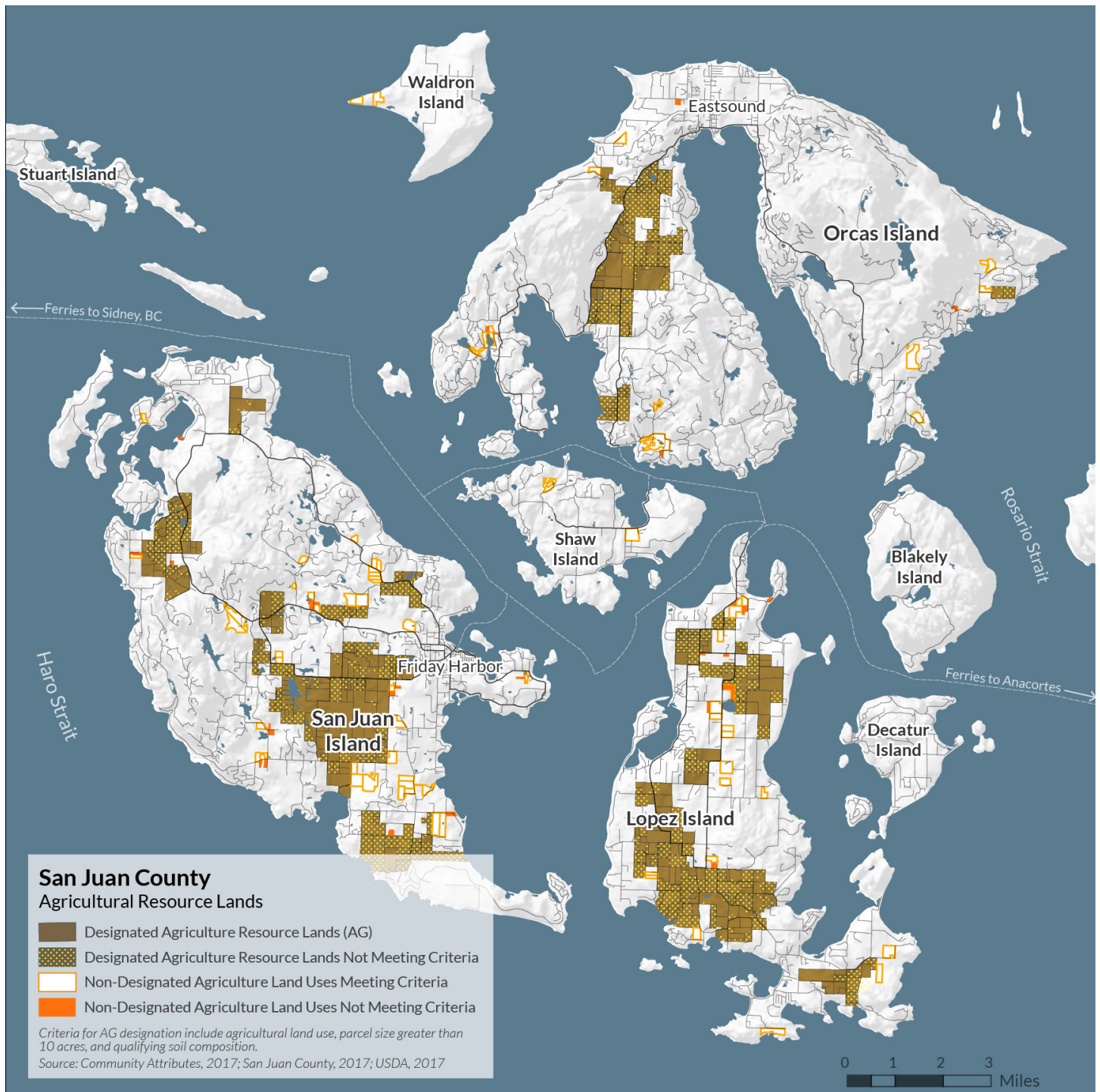
The following maps (Exhibits A21 and A22) illustrate lands that either are currently designated as agricultural resource lands, and that potentially do not meet the criteria for designation, or lands that are not currently designated as agricultural resource lands, but potentially could meet the criteria 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

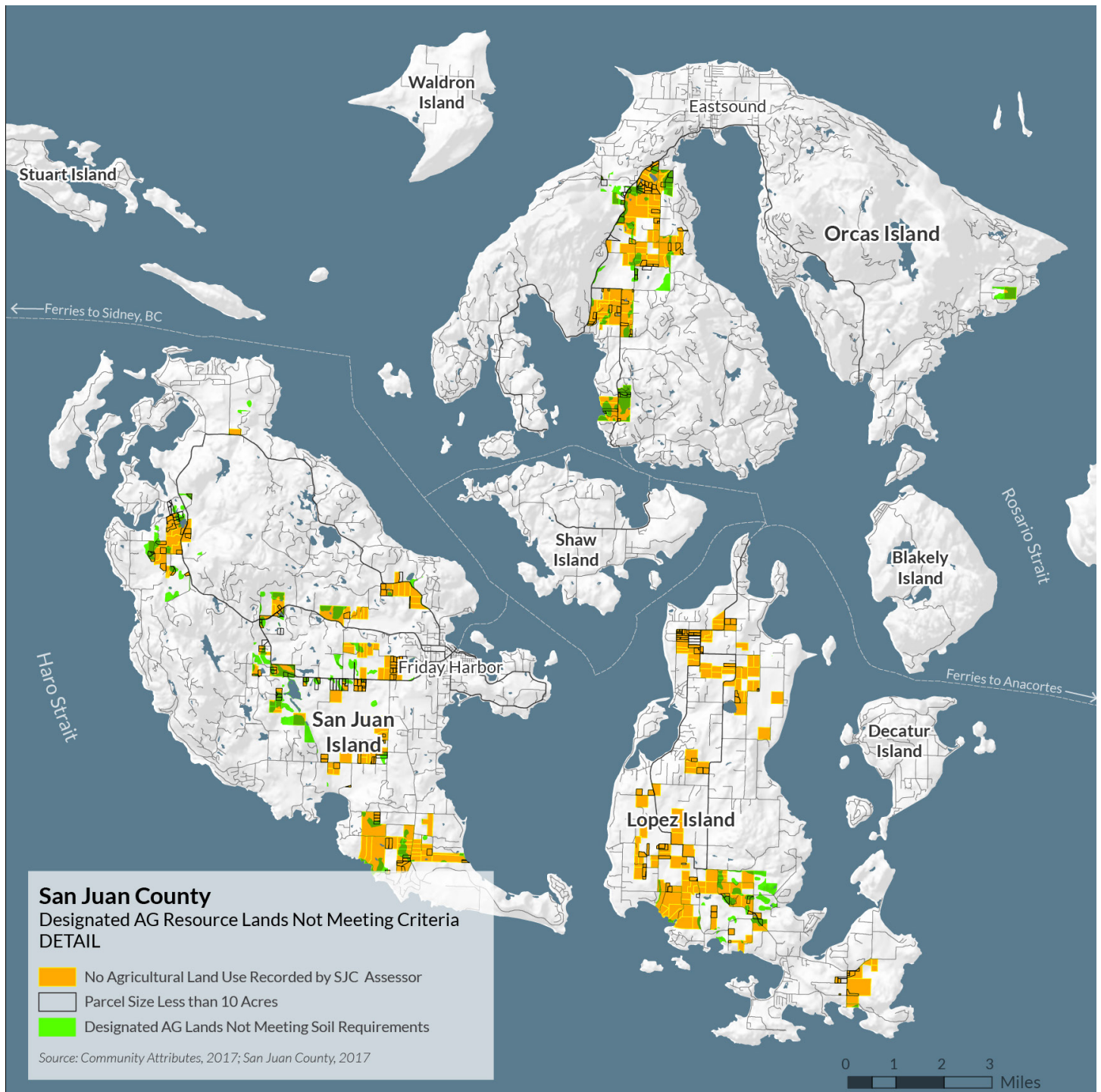
Exhibit A21. Agriculture Lands and Designation Status Map, San Juan County, 2017



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.

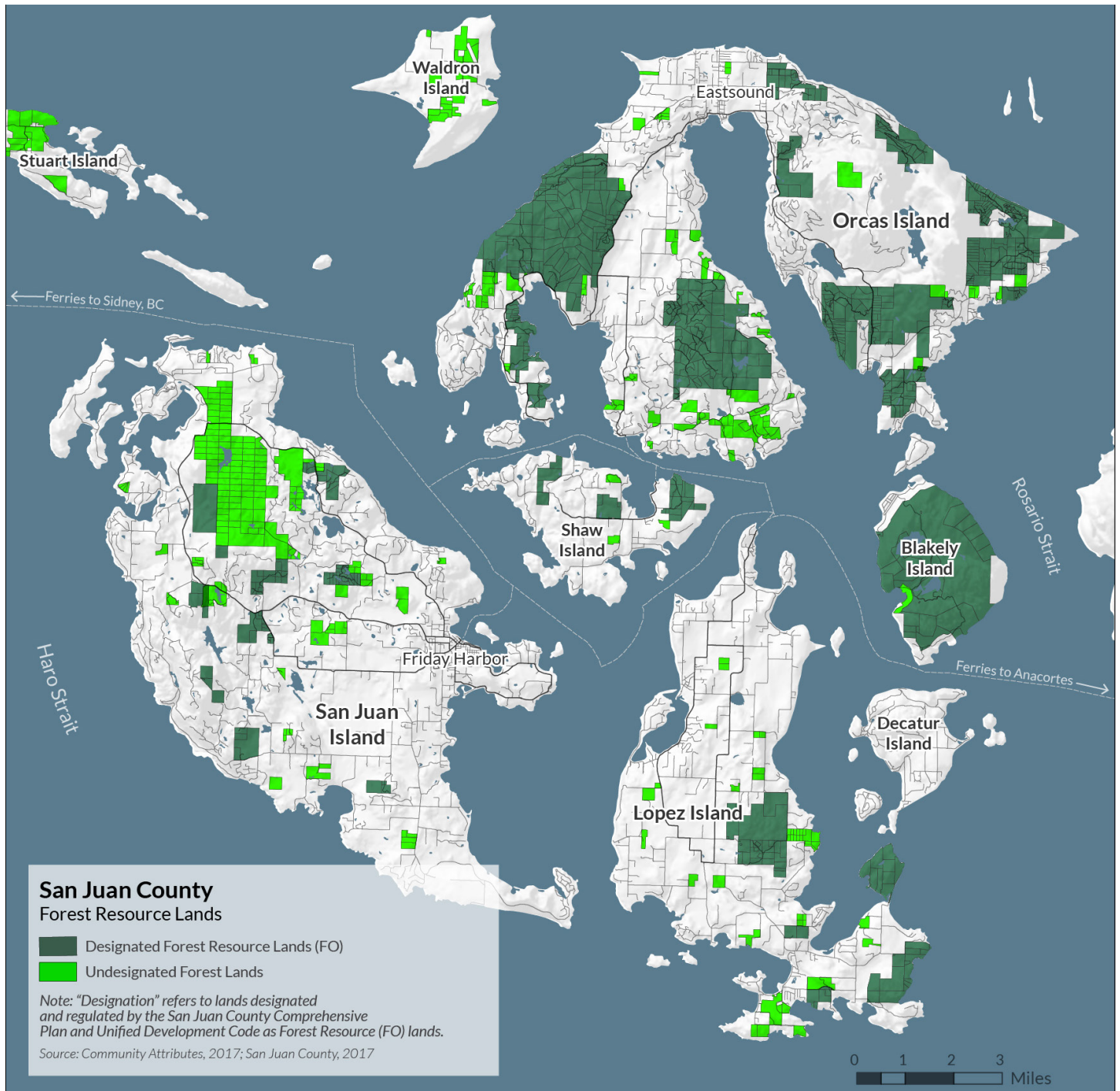
- **Advocates for Responsible Development and John Diehl v. Mason County, Case No. 07-2-0006:**

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:

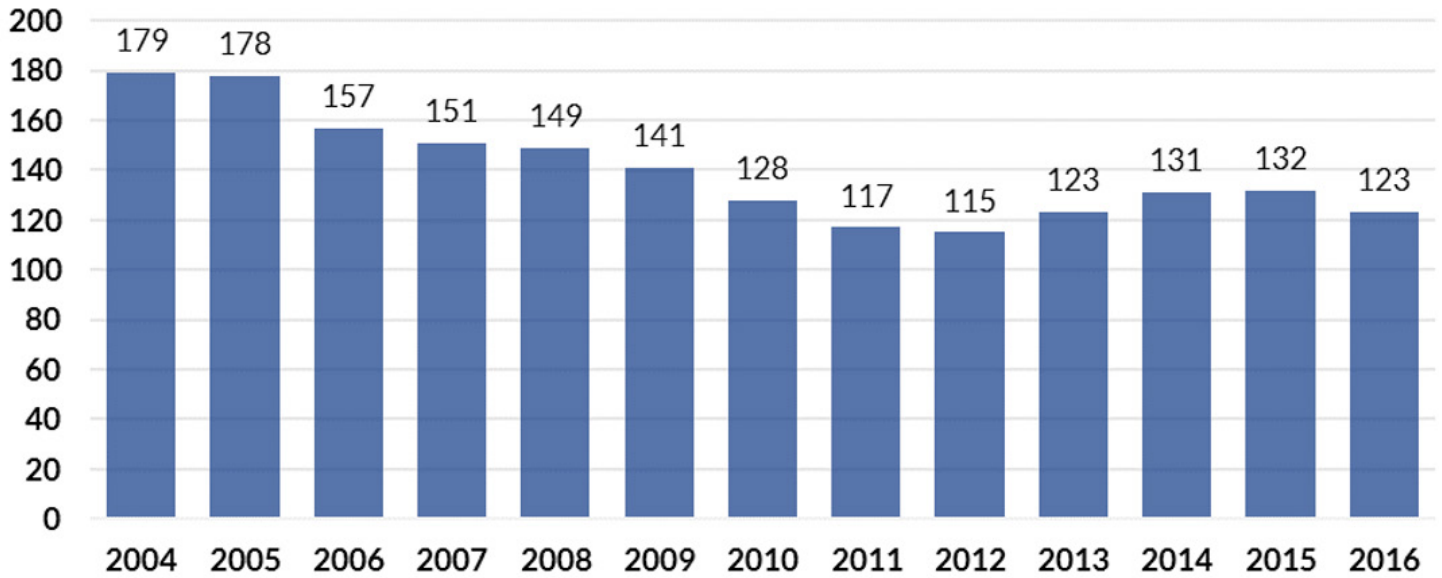
- Forest lands in western Washington are more productive than those in Eastern Washington.
- There are five timbersheds, or timber supply areas, in Western Washington.
- There are 9.5 million acres of unreserved timberland in Western Washington, 310,000 acres of which are restricted to use by Native 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



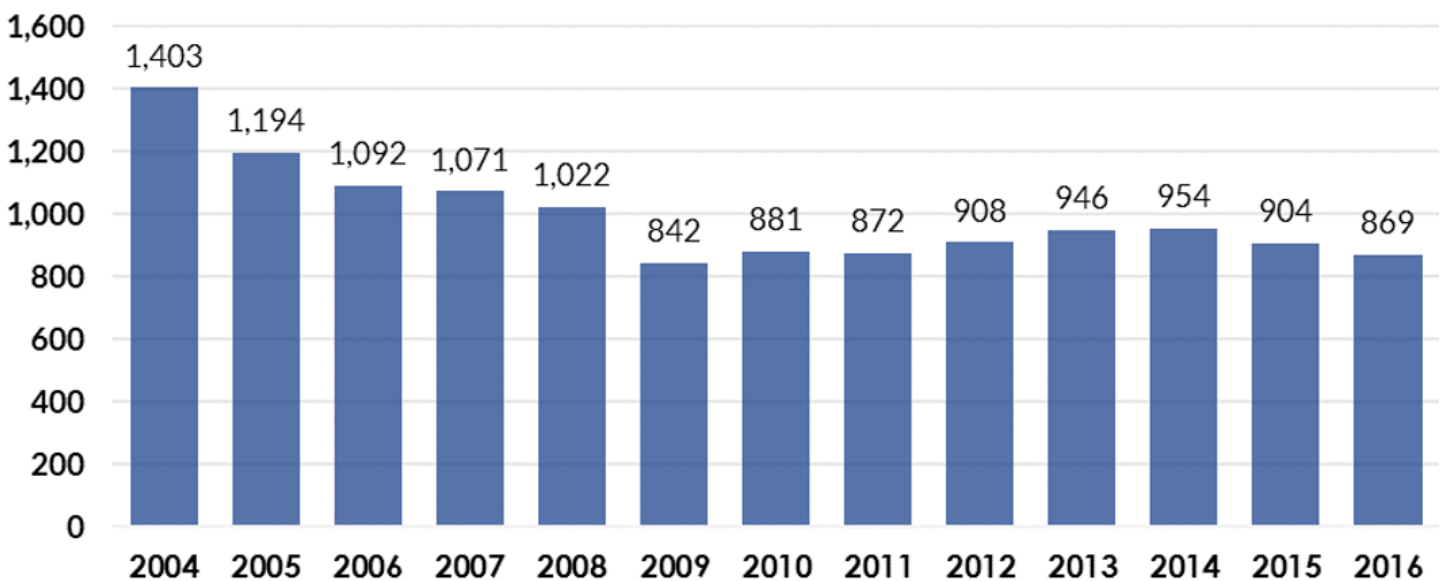
Source: Washington State Employment Security Department, 2017; U.S. Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

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

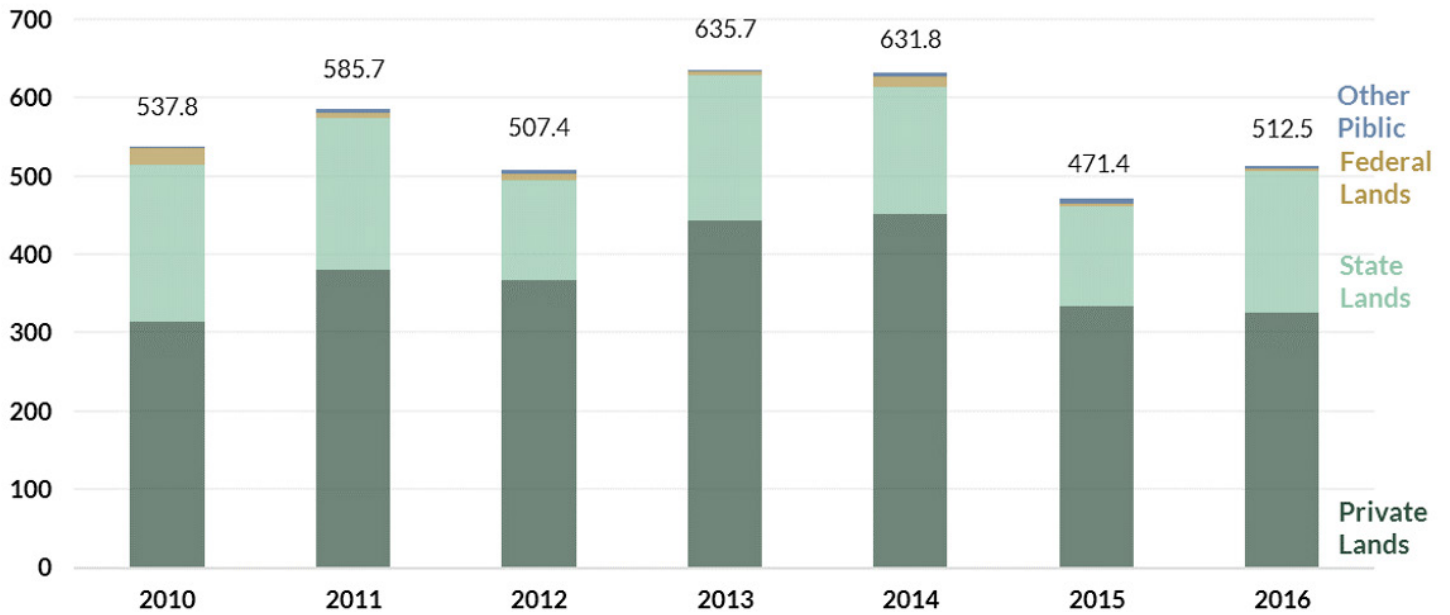
Source: San Juan County Assessor's Office, 2017; Community Attributes Inc., 2017

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

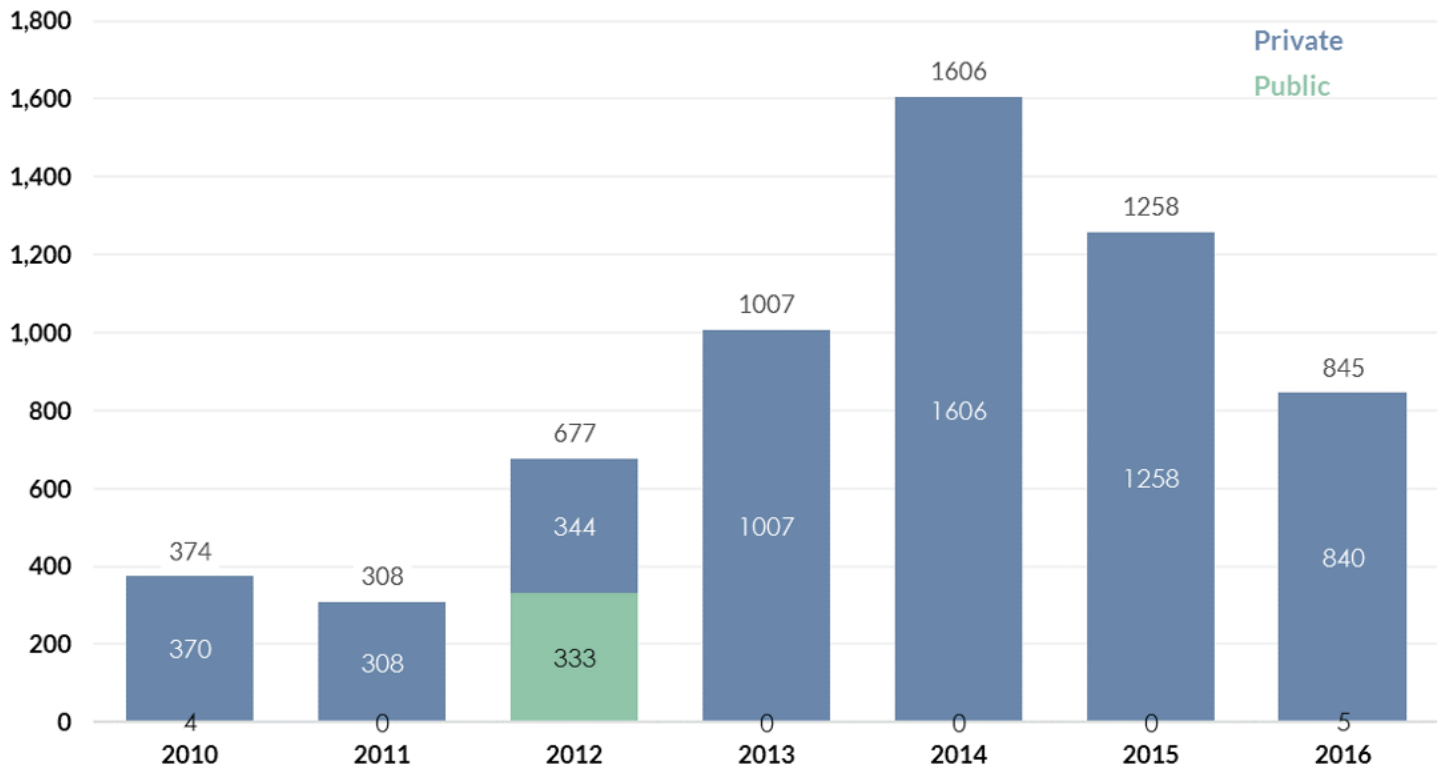
Million board feet



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

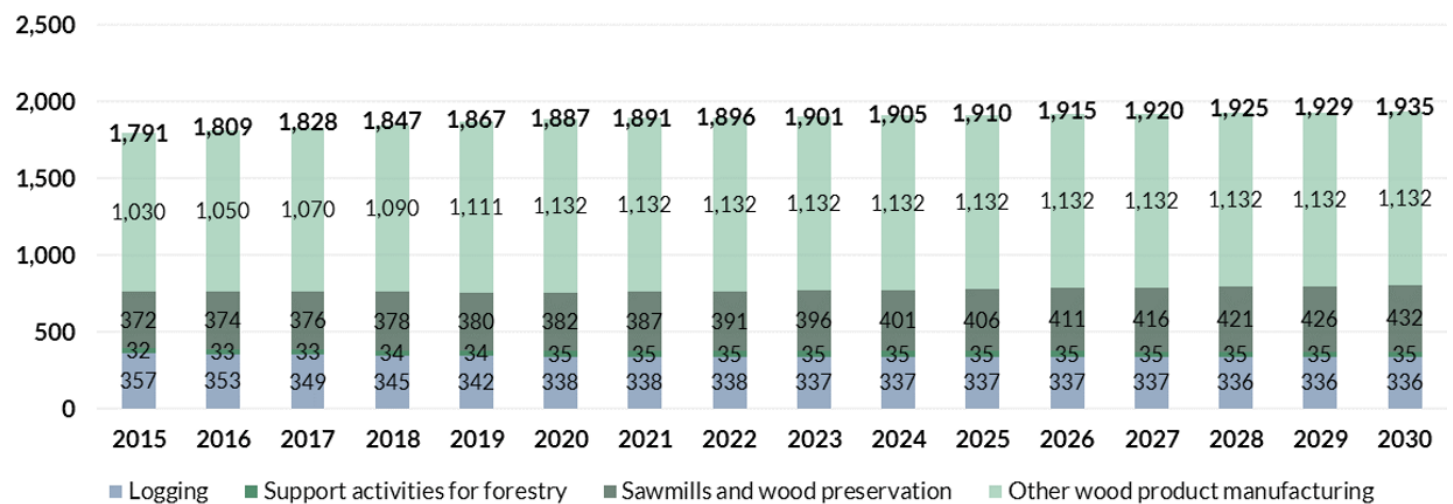
FUTURE GROWTH IN FORESTRY

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

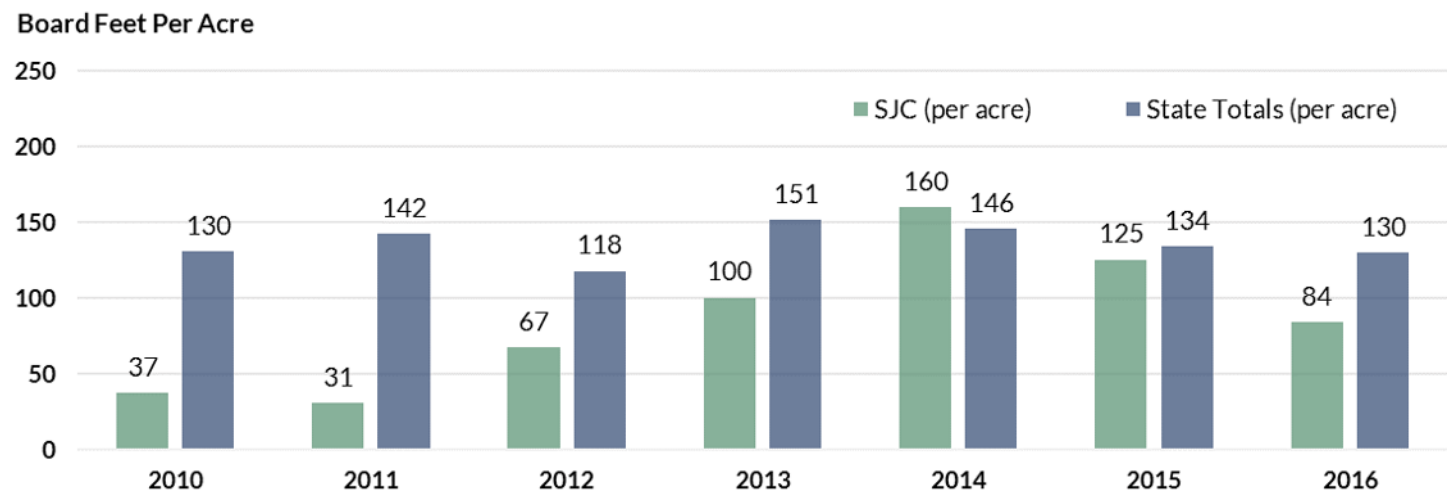
- Establishment growth/decline consistent with Washington state. The compound annual growth rate for the number of forestry establishments in San Juan County between 2004 and 2016 was -3.1%, which was similar to the rate for Washington State. However, growth in establishments across all industries in 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

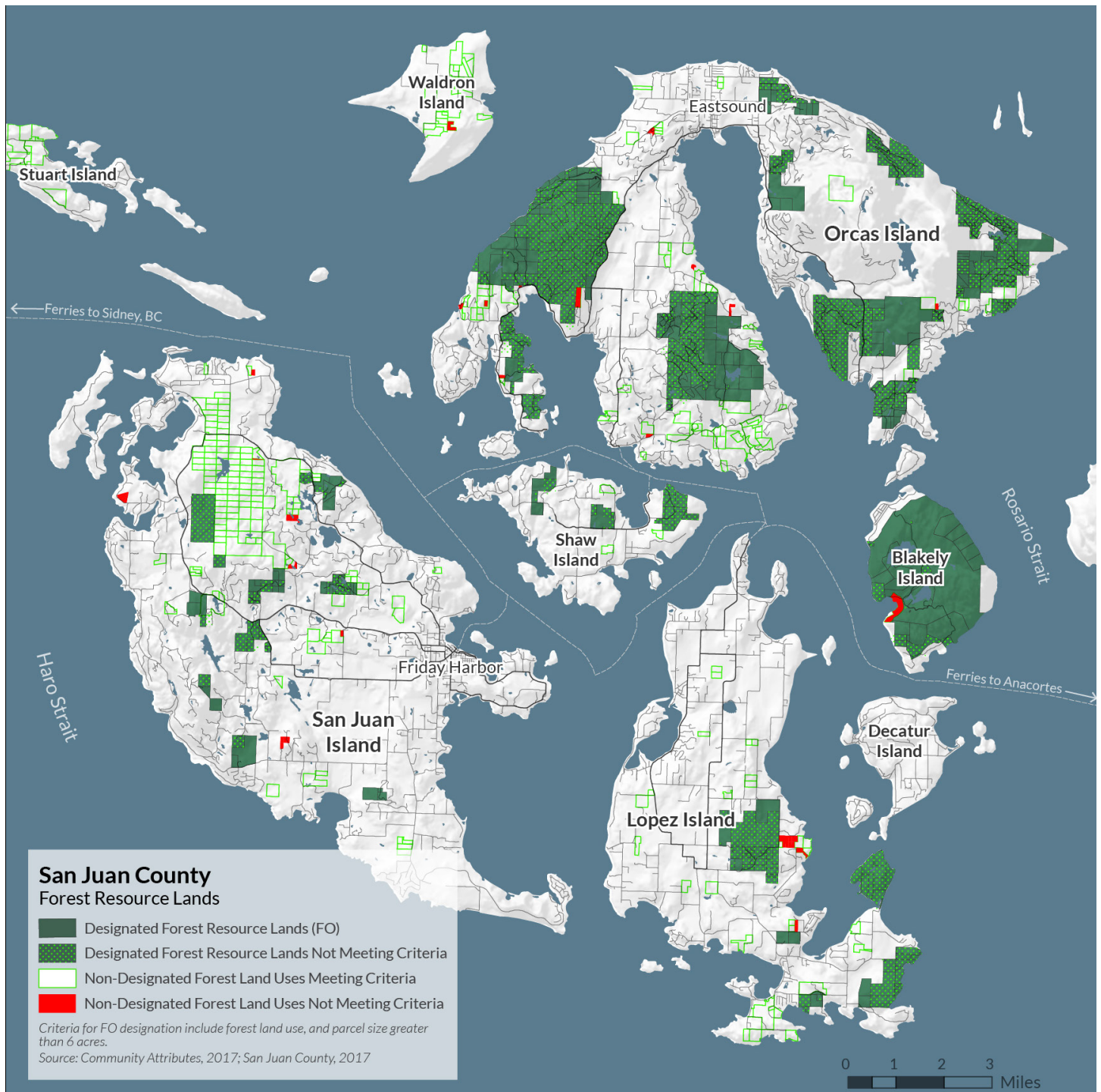
The following maps (**Exhibits F14 and F15**) illustrate lands that either are currently designated as forest resource lands, and that potentially do not meet the criteria for designation, or lands that are not currently designated as forest resource lands, but potentially could meet the criteria for 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

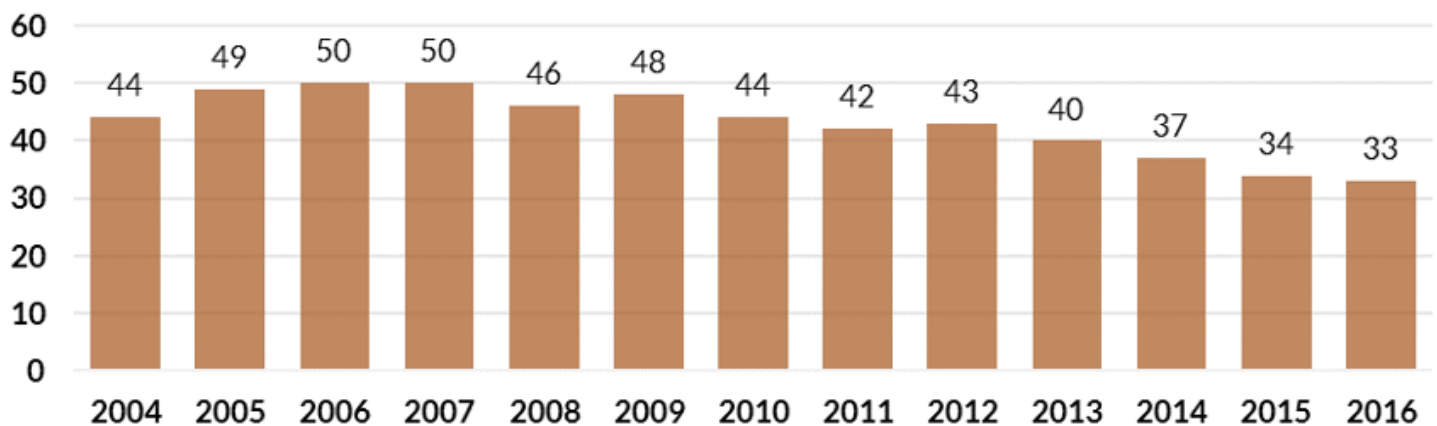
Source: Washington Department of Natural Resources, 2017

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**).

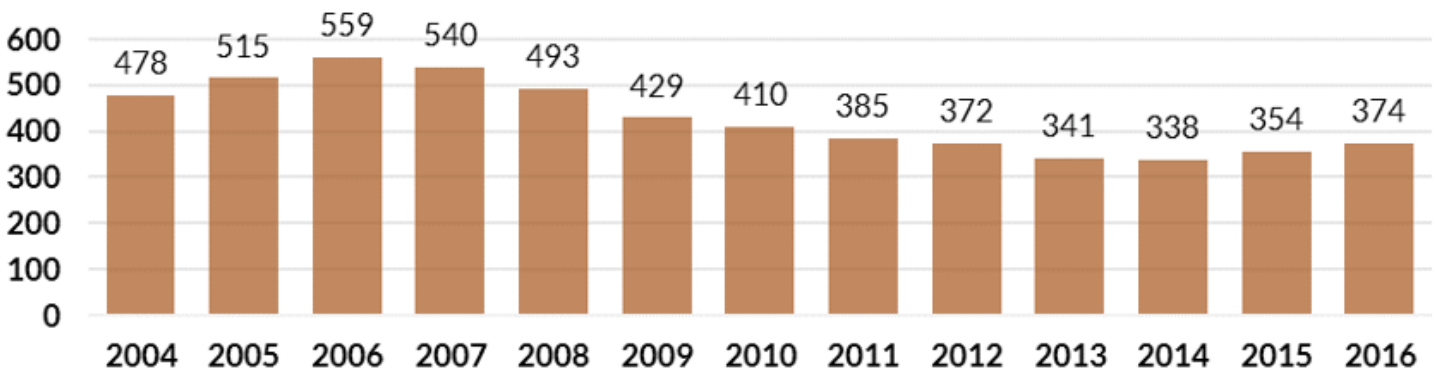
The average annual employment of Mining (except oil and gas) industry reached a recent peak of 559 jobs in 2006 (**Exhibit M4**). In 2016 there were 374 jobs, up slightly from 338 jobs in 2014.

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

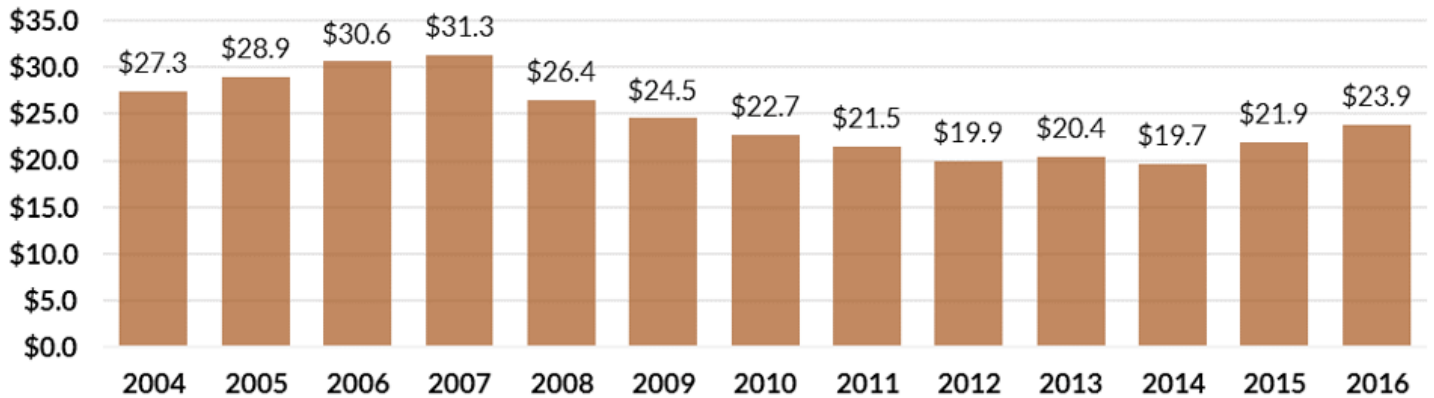
Jobs



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

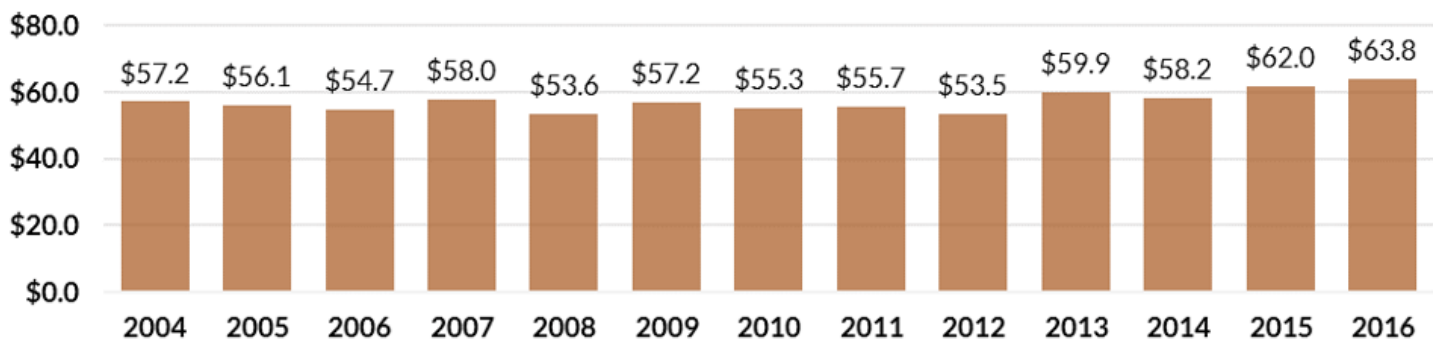
\$ 2016 Millions



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%

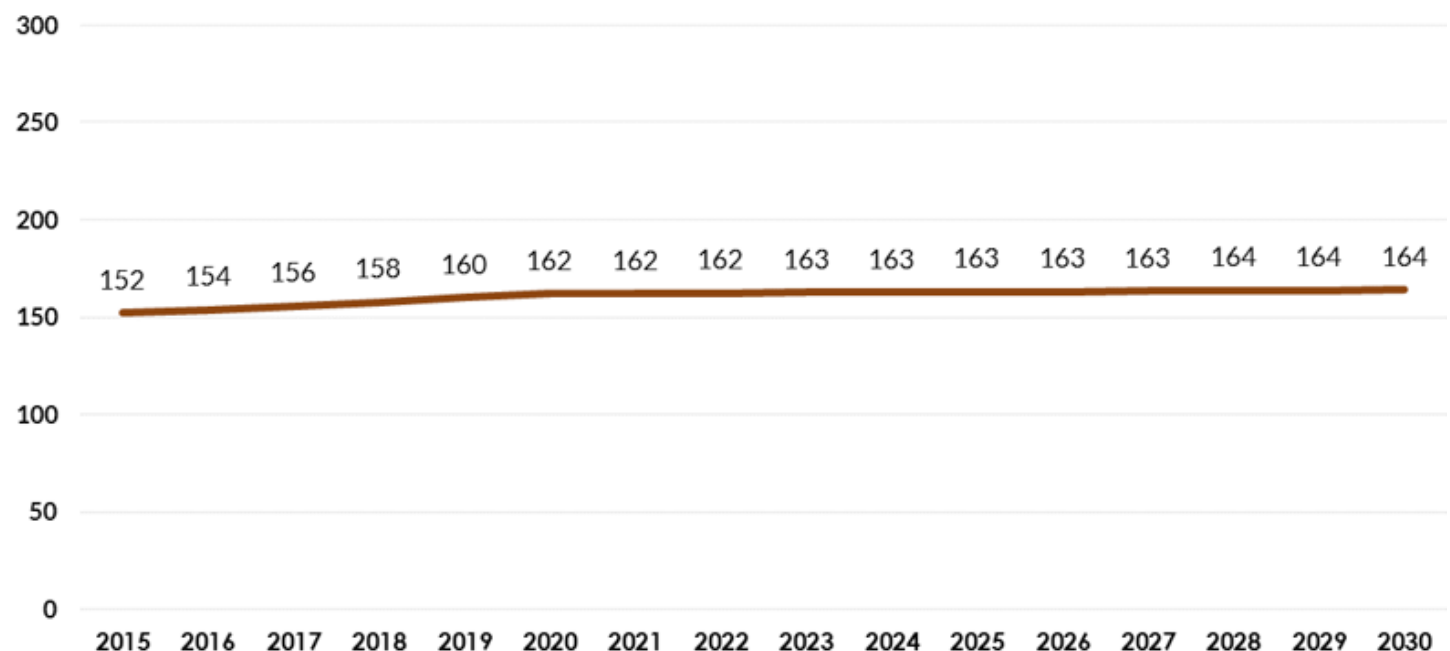
Source: Bureau of Labor Statistics, 2017; Community Attributes Inc., 2017

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>