

## **Natural Resource Lands Analysis Scope of Work**

### **Approach**

The consultant will analyze agricultural, forestry and mineral resource lands using rigorous, data-rich analytics to develop recommendations that will inform policy decisions. During the process, the consultant will combine their expertise in economic analysis with community engagement and strategy to help the community develop implementable plans that are rooted in both data and community sentiment.

The approach will be guided by three key principles to engage project stakeholders and ensure that both the strategic plan and comprehensive scheme of improvements are grounded in firm analysis:

- > Open and transparent communication to build trust in the ongoing process.
- > Thorough understanding of existing conditions within San Juan County and an understanding of its current land use trends and opportunities.
- > Integrated, interdisciplinary thinking to provide a holistic perspective on the economic viability of agriculture, forestry, and mining in San Juan County and the broader Western Washington region.

The approach will be generally consistent across all three resource land use types - agricultural, forestry and mining to allow for meaningful comparison across studies and greater efficiencies. Three (3) complete, separate reports will be produced, one for each resource land/industry. The scoping below delineates key tasks for each resource land type.

### **B.1 Agricultural Resource Lands Tasks**

#### **Task 1. Background Report**

The consultant will prepare a comprehensive review and assessment of all existing laws and regulations relevant for the agricultural resource land analysis. The background report will be organized in two sections, the first covering key rules and considerations, the second mapping existing agricultural resource lands.

#### **Deliverables:**

- Stakeholder engagement including:
  - > Development of stakeholder questions/input strategies with DCD staff
  - > Stakeholder interview
- Twenty-five (25) hard copies; and
- Electronic copies in Word and PDF of a report synthesizing the following:
  - > Applicable GMA regulations and guidelines for designating and de-designating agricultural lands;
  - > Applicable Plan Element B.2 Land Use goals and policies for agricultural resource land designation;
  - > Growth Management Hearings Board decisions and case law related to designation and de-designation of agricultural resource lands;
  - > Maps and designation data of existing agricultural resource lands;
  - > Other agricultural land use information; and

- Development of interactive tools for use by stakeholders such as online, dynamic mapping platforms that can be toggled and filtered on-screen during meetings, and storyboard documents that integrate interactive maps with report text.

## ***Task 2. Report Analyzing the Economic Analysis of the Vitality of Agriculture***

This task will entail an extensive data gathering effort and synthesis of findings to support policy decision-making.

### ***Deliverables:***

- Stakeholder engagement including:
  - > Development of stakeholder questions/input strategies with DCD staff
  - > Stakeholder interview
- Twenty-five (25) hard copies; and
- Electronic copies in Word and PDF of a report that addresses:
  - > **Existing conditions.** We will analyze data on jobs, wages and income, farming operations, revenues, and production output for farmers in San Juan and Western Washington. We will utilize several sources, including: the U.S. Department of Agriculture's Agriculture Census and National Agriculture Statistics Service; U.S. Bureau of Economic Analysis farm income and expense series by county; the Quarterly Census of Employment and Wages (QCEW) for jobs and wages, published by the Washington State Employment Security Department; and gross business income published by the Washington State Department of Revenue.
  - > **Development of economic viability criteria.** We will work collaboratively with San Juan County staff to determine the appropriate metrics for evaluating agricultural resource land economic viability. Potential criteria may be informed by growth rates, wealth generation, competitiveness, and size relative to other sectors of the regional economy. Some examples of potential criteria are listed below:
    - » *Income*—while not the only factor influencing decisions and forces affecting economic viability, it is potentially the most crucial; land users must derive sufficient income from agriculture activities on the land to continue using land for these purposes rather than for other purposes. Examples of indicators: total farm net income and average net income/acre in forestry.
    - » *Costs*—the higher are its production costs, the lower will be the economic profitability of agriculture, all else equal. Costs can influence net earnings, as well as timing of operations and input mix selection, such as tradeoffs between capital equipment and labor. Examples of indicators: total cost of production/acre in production, and labor costs.
    - » *Availability of resources*— agriculture depends on access to land and water resources but also access to labor and the productivity of all these resources. Examples of indicators: total acres in production, crop yield trends, and employment trends.
    - » *Competition and sustainability*—competitive pressures can affect the economic viability of the three sectors in several ways. Through internal and external market competition, demand from residential and commercial land development, and

demands from environmental restoration and protection. Examples of indicators: rate of change of agricultural prices, ratio of value of resource land/value of residential or commercial land, and share of resource land not in production.

- > **Assessment of economic viability for agriculture.** The consultant will apply the criteria for agriculture, developed in collaboration with San Juan County staff.
- > **Future growth in agriculture.** The consultant will leverage existing reports and forecasts to assess growth projections for agriculture for the broader geographic region of either Western Washington or Washington state overall, and provide important context for assessing future demand for resource land and subsequent recommendations.
- > **Mapping of agriculture activities.** The consultant will produce maps and accompanying summary exhibits to illustrate the distribution and clustering of agricultural activities and land use patterns across the county.
- > **Minimum land use requirements for agriculture.** The consultant will assess the minimum land use requirements for agriculture, based on economic profiling and viability analytics developed earlier in this task.

### ***Task 3. Recommendations***

The consultant will prepare a report of recommendations for agricultural resource lands that are clearly and transparently linked to findings from Tasks 1 and 2.

#### ***Deliverable:***

- Twenty-five (25) hard copies; and
- Electronic copies in Word and PDF or a report that includes recommendations about:
  - > Any needed amendments to Plan Element B.2 Land Use Goals and Policies; and
  - > Criteria and a methodology for evaluating and designating agricultural lands of long-term commercial significance.

### ***Task 4. Final Report and Maps***

The consultant will prepare a final report and maps that identify:

- > Tax parcels properly currently mapped as designated agricultural resource lands;
- > Parcels that are mapped but no longer meet the designation criteria; and
- > Parcels that are not mapped as agricultural resource lands that do meet the criteria.

#### ***Deliverables:***

- Twenty-five (25) hard copies of the report; and
- Electronic copies in Word and PDF;
- Three large scale hard copies of all maps; and
- Electronic files of the maps compatible with ARC GIS (shapefiles or layers)

## ***Task 5. Develop an “Open House” web page and materials to gather feedback on the specific proposals***

The consultant will develop an industry-specific web portal for use during the project.

### ***Deliverable:***

- An online tool that includes:
  - > Project information, specific proposals, and updates
  - > A project comment/feedback loop for stakeholders and the public

## ***Task 6. County Council and Planning Commission Briefings***

The consultant will brief the County Council and the Planning Commission (two daytime meetings total) to discuss the final reports and maps.

### ***Deliverables:***

- One daytime presentation to the County Council
- One daytime briefing to the Planning Commission
- Twenty-five (25) hard copies and electronic copies of the report and meeting materials in Word and PDF will be provided ten (10) days prior to the meeting
- 3 hard copies of the maps
- Electronic maps compatible with ARC GIS (shapefiles or layers)

## ***Schedule***

A detailed schedule shall be mutually agreed upon by the parties after execution of this contract. The contract work shall begin directly after the contract execution and end by December 31, 2017.

## **B.2 Forest Resource Lands Tasks**

### **Task 1. Background Report**

The consultant will prepare a comprehensive review and assessment of all existing laws and regulations relevant for the forestry analysis. The background report will be organized in two sections, the first covering key rules and considerations, the second mapping existing forest resources.

#### **Deliverables:**

- Stakeholder engagement including:
  - > Development of stakeholder questions/input strategies with DCD staff
  - > Stakeholder interview
- Twenty-five (25) hard copies and electronic copies in Word and PDF of a report synthesizing the following:
  - > Applicable GMA regulations and guidelines for designating and de-designating forest lands;
  - > Applicable Plan Element B.2 Land Use goals and policies for forest resource land designation;
  - > Growth Management Hearings Board decisions and case law related to designation and de-designation of agricultural resource lands;
  - > Maps and designation data of existing agricultural resource lands;
  - > Other agricultural land use information; and
  - > Obtain input from local stakeholders including from resource committees and San Juan Conservation District.

### **Task 2. Economic Analysis of the Vitality of Forestry**

This task will entail an extensive data gathering effort and synthesis of findings to support policy decision-making.

#### **Deliverables:**

- Stakeholder engagement including:
  - > Development of stakeholder questions/input strategies with DCD staff
  - > Stakeholder interview
- Twenty-five (25) hard copies; and
- Electronic copies in Word and PDF of a report that addresses:
  - > **Existing conditions.** An economic profile of forestry activities in San Juan County and across Western Washington counties, including forestry operations. The consultant will refer to data and publications by the Washington State Department of Natural Resources and industry associations.
  - > **Development of economic viability criteria.** The consultant will work collaboratively with San Juan County staff to determine the appropriate metrics for evaluating forestry economic viability. Potential criteria may be informed by growth rates, wealth generation, competitiveness, and size relative to other sectors of the regional economy. Some examples of potential criteria are listed below:

- » *Income*—while not the only factor influencing decisions and forces affecting economic viability, it is potentially the most crucial; land users must derive sufficient income from forestry activities on the land to continue using land for these purposes rather than for other purposes. Examples of indicators can include average net income/acre in forestry.
  - » *Costs*—the higher are its production costs, the lower will be the economic profitability of forestry, all else equal. Costs can influence net earnings, as well as timing of operations and input mix selection, such as tradeoffs between capital equipment and labor. Examples of indicators: total cost of production/acre in production, and labor and transportation costs.
  - » *Availability of resources*— forestry depends on access to land and water resources but also access to labor and the productivity of all these resources. Examples of indicators: timber harvest yield and employment trends.
  - » *Competition and sustainability*—competitive pressures can affect the economic viability of the three sectors in several ways. Through internal and external market competition, demand from residential and commercial land development, and demands from environmental restoration and protection. Examples of indicators: rate of change of timber prices, ratio of value of resource land/value of residential or commercial land, and share of resource land not in production.
- > **Assessment of economic viability for forestry.** The consultant will apply the criteria for forestry, developed in collaboration with San Juan County staff.
  - > **Future growth in forestry.** The consultant will leverage existing reports and forecasts to assess growth projections for forestry for the broader geographic region of either Western Washington or Washington state overall, and provide important context for assessing future demand for resource land and subsequent recommendations.
  - > **Mapping of forestry activities.** The consultant will produce maps and accompanying summary exhibits to illustrate the distribution and clustering of agricultural activities and land use patterns across the county.
  - > **Minimum land use requirements for forestry.** The consultant will assess the minimum land use requirements for forestry, based on economic profiling and viability analytics developed earlier in this task.

### ***Task 3. Recommendations***

Recommendations for forestry will be clearly and transparently linked to findings from Tasks 1 and 2.

#### ***Deliverables:***

- Twenty-five (25) hard copies; and
- Electronic copies in Word and PDF or a report that includes recommendations about:
  - > Any needed amendments to Plan Element B.2 Land Use Goals and Policies; and
  - > Criteria and a methodology for evaluating and designating forest lands of long-term commercial significance.

## ***Task 4. Final Report and Maps***

The consultant will prepare a final report and maps that identify:

- > Tax parcels properly currently mapped as designated forest resource lands;
- > Parcels that are mapped but no longer meet the designation criteria; and
- > Parcels that are not mapped as forest resource lands that do meet the criteria.

### ***Deliverables:***

- Twenty-five (25) hard copies of the report; and
- Electronic copies in Word and PDF;
- Three large scale hard copies of all maps; and
- Electronic files of the maps compatible with ARC GIS (shapefiles or layers)

## ***Task 5. Develop an "Open House" web page and materials to gather feedback on the specific proposals***

The consultant will develop an industry-specific web portal for use during the project.

### ***Deliverable:***

- An online tool that includes:
  - > Project information, specific proposals, and updates
  - > A project comment/feedback loop for stakeholders and the public

## ***Task 6. County Council and Planning Commission Briefings***

The consultant will brief the County Council and the Planning Commission (two daytime meetings total) to discuss the final reports and maps.

### ***Deliverables:***

- One daytime presentation to the County Council
- One daytime briefing to the Planning Commission
- Twenty-five (25) hard copies and electronic copies of the report and meeting materials in Word and PDF will be provided ten (10) days prior to the meeting
- 3 hard copies of the maps
- Electronic maps compatible with ARC GIS (shapefiles or layers)

## ***Schedule***

A detailed schedule shall be mutually agreed upon by the parties after execution of this contract. The contract work shall begin directly after the contract execution and end by December 31, 2017.

## **B.3 Mineral Resource Lands Tasks**

### **Task 1. Background Report**

The consultant will prepare a comprehensive review and assessment of all existing laws and regulations relevant for the mineral resource land analysis. The background report will be organized in two sections, the first covering key rules and considerations, the second mapping proposed mineral resource lands.

#### **Deliverable:**

- Stakeholder engagement including:
  - > Development of stakeholder questions/input strategies with DCD staff
  - > Stakeholder interview
- Twenty-five (25) hard copies and electronic copies in Word and PDF of a report synthesizing the following:
  - > Applicable GMA regulations and guidelines for designating and de-designating mineral resource lands;
  - > Applicable Plan Element B.2 Land Use goals and policies for mineral resource land designation;
  - > Growth Management Hearings Board decisions and case law related to designation of mineral resource lands;
  - > Maps and designation data of mineral resource lands; and
  - > Other mineral land use information

### **Task 2. Economic Analysis of the Vitality of Mining**

This task will entail an extensive data gathering effort and synthesis of findings to support policy decision-making.

#### **Deliverables:**

- Stakeholder engagement including:
  - > Development of stakeholder questions/input strategies with DCD staff
  - > Stakeholder interview
- Twenty-five (25) hard copies; and
- Electronic copies in Word and PDF or a report that addresses:
  - > **Existing conditions.** Analysis of mining operations in the county and across Western Washington, based on state business licenses, interviews with local stakeholders, and supporting materials.
  - > **Development of economic viability criteria.** The consultant will work collaboratively with San Juan County staff to determine the appropriate metrics for evaluating mining and mineral resource land economic viability. Potential criteria may be informed by growth rates, wealth generation, competitiveness, and size relative to other sectors of the regional economy. Some examples of potential criteria are listed below:
    - » *Income*—while not the only factor influencing decisions and forces affecting economic viability, it is potentially the most crucial; land users must derive sufficient income from mining activities on the land to continue using land for these purposes rather than for other purposes. Examples of indicators: total farm net

income, average net income/acre in forestry, and average net income/farm operation.

- » *Costs*—the higher are its production costs, the lower will be the economic profitability of mining, all else equal. Costs can influence net earnings, as well as timing of operations and input mix selection, such as tradeoffs between capital equipment and labor.
  - » *Availability of resources*— mining depends on access to land and water resources but also access to labor and the productivity of all these resources.
  - » *Competition and sustainability*—competitive pressures can affect the economic viability of the three sectors in several ways. Through internal and external market competition, demand from residential and commercial land development, and demands from environmental restoration and protection.
- > **Assessment of economic viability for mining.** The consultant will apply criteria for mining, developed in collaboration with San Juan County staff.
  - > **Future growth in mining.** The consultant will leverage existing reports and forecasts to assess growth projections for mining for the broader geographic region of either Western Washington or Washington state overall, and provide important context for assessing future demand for resource land and subsequent recommendations.
  - > **Mapping of mining activities.** The consultant will produce maps and accompanying summary exhibits to illustrate the distribution and clustering of mineral resource activities and land use patterns across the county.
  - > **Minimum land use requirements for mining.** The consultant will assess the minimum land use requirements for mining, based on economic profiling and viability analytics developed earlier in this task.

### ***Task 3. Recommendations***

Recommendations for mining will be clearly and transparently linked to findings from Tasks 1 and 2.

#### ***Deliverables:***

- Twenty-five (25) hard copies of the report; and
- Electronic copies in Word and PDF with recommendations to include:
  - > Any needed amendments to Plan Element B.2 Land Use Goals and Policies; and
  - > Criteria and a methodology for evaluating and designating agricultural lands of long-term commercial significance.

### ***Task 4. Mineral Resource Lands Final Report and Maps***

The consultant will prepare a final report and maps that identify:

- > Parcels proposed to be designated as mineral resource lands

#### ***Deliverables:***

- Twenty-five (25) hard copies or the report; and
- Electronic copies in Word and PDF;

- Three large scale hard copies of all maps; and
- Electronic files of the maps compatible with SJC GIS (shapefiles or layers)

### ***Task 5. Develop an “Open House” web page and materials to gather feedback on the specific proposals***

The consultant will develop an industry-specific web portal for use during the project.

#### ***Deliverable:***

- An online tool that includes:
  - > Project information, specific proposals, and updates
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***Schedule*** A detailed schedule shall be mutually agreed upon by the parties after execution of this contract. The contract work shall begin directly after the contract execution and end by December 31, 2017.