

Thurston County Voluntary Stewardship Program Work Plan

Appendix M – Agricultural Viability

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1.1 Definition of “Agricultural Viability”

Preamble

Though preservation of Ag land is an important tool in the Ag Viability toolbox, simply saving farmland isn’t sufficient to keep the Ag industry viable. A healthy and prosperous farm economy is the foundation of a strong food system. The bumper stickers make the point concisely: “No farms, no food” and “It’s not farmland without farmers”. Ag viability and local food security turn first and foremost on the economic viability of farm and ranch operations, and that depends on several necessary Ag viability elements. Consistent VSP efforts to strengthen these elements on a county or watershed-wide basis (not farm-by-farm), will help maintain and enhance the viability of Thurston County agriculture. The five elements of agricultural viability in this document are also applicable to aquaculture and necessary resources, including growing area and clean water. This is implied through the remainder of the document when agriculture or resources are mentioned.

Agricultural Viability. The Thurston County Voluntary Stewardship Program defines “agricultural viability” in the following manner:

1.1.1 Land Resources

Agriculture requires adequate land with good soil to produce healthy crops of food, fiber, and fuel. Businesses that support agriculture (like farm & garden stores, horticultural operations, food processors, suppliers, equipment dealers and repair facilities) need an adequate base of productive agricultural lands to remain viable.

Potential Ag Viability land base indicators to inventory and track:

- a) Acreage of agriculture measured by:
 - i. Ag activities that intersect with critical areas (as defined and mapped in the VSP baseline information for agricultural activities), and
 - ii. Acreage of farmland from the USDA Census
- b) Acreage of agricultural area use change (documented in stewardship plans, site level)
- c) Acreage in farmland protection programs, such as Open Space Farm and Ag and designated Agricultural Land

1.1.2 Water Resources

Agricultural production needs clean water to grow crops and farms/ranches need access to sufficient water resources in order to remain viable. Therefore, laws must support farmers’ existing and future water rights and farms’ access to sufficient water quantity and quality in order to maintain and enhance agricultural production.

Potential Ag viability water resource indicators to inventory and track:

- a) Water resources education and outreach efforts-tracked by number of hits on a water resources clearinghouse webpage and/or the number of outreach materials distributed.
- b) Number of irrigation efficiencies implemented and structural/operational improvements to water infrastructure. Track outcome reporting from NRCS grants for irrigation improvements, TCD projects and Stewardship Plans.

- c) Number of water rights certifications, claims, permits, and applications, as well as transfers, banking and similar water conservation efforts (number of transactions measuring a status change in water rights).

1.1.3 Regulatory Reform

Producers need reasonable and predictable standards and streamlined processes to reduce time and costs.

Potential Ag viability regulatory indicators to inventory and track:

- a) Outreach to farmers: Number of technical assistance staff (TCD and/or Ag Liaison) available and resources provided to facilitate a better understanding of the current rules and regulations.
- b) Outreach to policy-makers: Number of efforts/resources provided to support and promote policy-makers and regulators understanding of agriculture related issues, regulatory pressures, and making needed reforms to maintain or enhance Ag Viability.
- c) Number of new or amended Ag related regulations and how they impact agriculture.

1.1.4 Infrastructure

Includes “hard” and “soft” infrastructure. Viable agriculture needs “hard” infrastructure including transportation, water and waste utilities, drainage systems, access to markets, processing facilities, and equipment. Ag viability also depends on “soft” infrastructure, or human capital, and a healthy network of community support for producers, including labor, training and education, university and field research, technical assistance, and farm succession resources.

Potential Ag viability infrastructure indicators to inventory and track:

- a) New or improved agriculture infrastructure.
- b) Number of events or workshops for networking between farmers or between farmers and agencies.
- c) Number of assistance courses or educational workshops, number of pilot projects or demonstration events.

1.1.5 Market

Economic viability of agriculture relies on the profitability of farm operations, including efficient production, diversification of agricultural products, direct marketing, value-added opportunities, available consumers, and agri-tourism. Agricultural operators require readily available access to accurate and timely information in order to meet ongoing changes in the marketplace, as well as access to farm bill assistance, business planning, financial assistance, borrowing tools, value-added product development and marketing. Agricultural markets may provide job opportunity, rural development, income generation, food security, reduce health risks, and other benefits.

Potential Ag viability market indicators to inventory and track:

- a) Number of farmers markets and/or CSA farms/sales.
- b) Branding efforts to increase value of ag products (i.e. number of “VSP Good Steward” or other certifications).
- c) Market Value of Ag (USDA Ag Census) and local farmers markets revenue.

1.2 Research Plan for Determining Agricultural Viability in Thurston County

1.2.1 Research Plan for Determining Agricultural Viability in Thurston County

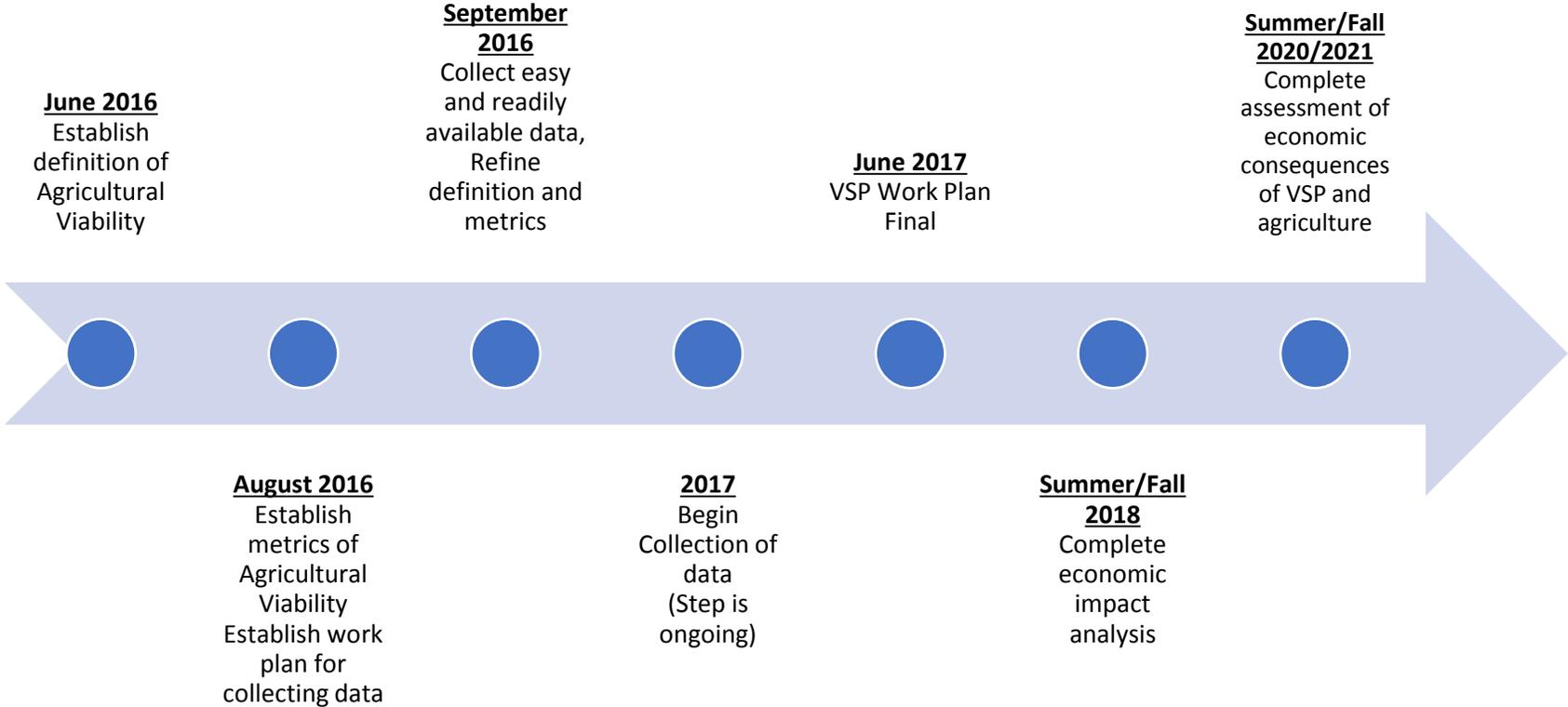
The Agricultural Viability Subcommittee recommends the following approach in collecting data to determine what the Agricultural Viability of Thurston County is. Some steps have already been completed, whereas other steps in the process are intended to be carried out after the final submittal of the VSP work plan to the Technical Panel.

✓	<p>1. Define Agricultural Viability.</p> <ul style="list-style-type: none"> • The Subcommittee has created a definition and identified essential elements for agricultural viability. (<i>see section 1.1</i>) • The Subcommittee has reviewed the draft WSDA and WSCC definitions and will revisit at a later meeting. • The Subcommittee has discussed convening one or several forums of farmers & agricultural businesses as a way to brainstorm and better understand Thurston County’s “agricultural economy.”
✓	<p>2. Establish Metrics for Agricultural Viability.</p> <ul style="list-style-type: none"> • These will be used in the larger work plan, but can serve as inputs into economic analyses (<i>see step 6 and 7</i>).
✓	<p>3. Establish a plan for collecting data to determine Agricultural Viability. (<i>see attachment 2</i>)</p> <ul style="list-style-type: none"> • After developing working definitions and scoping what the Thurston County agricultural economy is, the Subcommittee indicated its preference for working through a consortium of local colleges and universities for data collection and technical support. • The subcommittee identified a need for funding in order to complete this task, and should include a funding strategy in the work plan.
✓	<p>4. Collect data from USDA, WSDA, and local farmers markets.</p>
	<p>5. Begin collection of data, as laid out in the plan (<i>see section 1.2.3</i>). This step is not intended to be complete before VSP plan submittal, but to be on-going.</p>
	<p>6. Annually or bi-annually: Complete an economic impact analysis. This assesses the impact of agriculture on Thurston County, and can use readily available data and what is collected by the VSP metrics. This is a general analysis that would not evaluate specific legislation, but is easier to do and takes 2-3 months to complete. (<i>see section 1.2.4</i>)</p>
	<p>7. Long Term Goal: Work towards an assessment of economic consequences of VSP in relation to agriculture. This approach summarizes how specific policy affects industry outputs, but is longer, takes more data, and is more expensive. This is a target analysis for year 3 or 4. (<i>see section 1.2.4</i>)</p>

The Washington State Conservation Commission’s DRAFT definition of Agricultural Viability:
http://scc.wa.gov/wp-content/uploads/2016/09/WSCC-Ag-Viability-paper.final_draft.pdf

The Washington State Department of Agriculture’s DRAFT definition of Agricultural Viability:
http://scc.wa.gov/wp-content/uploads/2016/09/VSP_Ag-Viability-WSDA.pdf

Agricultural Viability Timeline & Process



1.2.2 Data Collection Plan for Economic Analysis

Step 1: The first step is to develop a comprehensive overview of what our agricultural economy is. This can be done by convening one or more groups of stakeholders--the various interests that make up this sector of our local economy-- and ask them to describe the sector and its parts. The stakeholders should necessarily include farmers and ranchers as well as businesses that sell to and buy from them, but should not include government agencies, non-profit organizations, or other entities that do not qualify as agricultural producers or agricultural businesses.

Step 2: Once we have developed a comprehensive overview, we can begin to assess the value of its parts using a “two currency” approach described below.

Monetary Value Approach	Social Value Approach
<ul style="list-style-type: none"> • This would use traditional economic approaches for determining the “market value” of agricultural activity. It would assess and portray the value of local agriculture in terms of dollars and cents. • Developing market data for this assessment would be a dynamic process based on the belief that we should start with a relatively simple approach that would grow and improve over time: <ul style="list-style-type: none"> ○ Initially we can use data currently available from contemporary sources (USDA, WSDA, etc.). ○ This can be supplemented by readily available data from local economic sectors that are currently maintaining financial records (such as sales data from the farmers markets and agricultural businesses around the county). ○ This should also be accompanied by a longer range data collection plan that aims to develop protocols for ascertaining the value of all other sub-sectors of the agricultural economy ○ These market values should be periodically reviewed and reassessed. 	<ul style="list-style-type: none"> • This would use a narrative approach for determining the “social value” of agricultural activity. It would determine “value” (per the definition below) based on the usefulness or importance of agriculture activities or production to our community. • Developing social value data will require an interactive process with the community. This would also be based on the belief that we should start with a relatively simple approach that would improve and grow over time: <ul style="list-style-type: none"> ○ The VSP stakeholders can develop an initial list of social values (i.e. food security, access to fresh food, etc.) served by a healthy agricultural economy and can also suggest the relative importance of each. ○ These values and their relative priorities can then be reality-checked, supplemented, and expanded through public feedback. This feedback can be collected in a number of ways (public meetings, phone or internet surveys, etc.) ○ This public assessment should be periodically rechecked and updated as necessary.
<ul style="list-style-type: none"> • Once we have completed an initial market-based and social value-based assessment of our local agricultural economy, we will have a comprehensive overview that we can work with to develop metrics and benchmarks for VSP. It will give us an objective means to determine whether our local agricultural economy is growing or shrinking and whether the local “farming and food production environment” is healthy. • As we refine these protocols and learn how to improve data collection, our understanding of our local agricultural economy and the benefits that it provides to our community will grow and broaden. • Data collection efforts should be undertaken via a private/public partnership spear-headed by our local institutions of higher education (St. Martins University, Washington State University, Evergreen State College, and the South Puget Sound Community College). • The data collection plan should include funding strategies. • Over the next several months, we will incorporate literature search information obtained by Dr. Moore, Dr. Brady and others. 	

1.2.2.1 Discussion of the Approach

Goal: One of the principle tasks of the Thurston County Voluntary Stewardship Program Pilot Project is to develop a means for Thurston County to determine if it is meeting its responsibilities to “support and enhance” local agriculture.

The VSP Work Group has determined that agriculture needs a healthy economy to support it in order to be “viable”. The goal of this working paper then is to develop a framework for 1) determining what Thurston County’s agricultural economy is, 2) determining its value to the community, and 3) calculating whether it is growing or not.

1.2.2.2 Working Definitions:

“Agriculture” Generally, the production of food, fiber, and fuel.

“Agricultural economy” The relationships and interactions among agricultural producers and with those who buy from and sell to them.

“Forms of Return on Agricultural Production” The return created by agricultural production includes the following:

- **“subsistence production”** -- growing agricultural products for consumption by the producer and his/her family.
- **“charitable production”**— growing agricultural products to help those in need.
- **“commercial production”** – growing agricultural products for sale

“Commodity Crops” - Crops that are not sold directly to the public and which are typically grown in vast quantities on large tracts of land using industrial methods.

“Economy” The process or system by which goods and services are produced, bought and sold. (Merriam Webster Dictionary)

“Hobby Farming” - A derogatory and misleading term sometimes used to describe market gardening and small acreage agricultural production.

“Market Gardening” Growing crops (usually fruits, vegetables, and flowers) in modest amounts usually on small holdings for direct sale to consumers.

“Value” Usefulness or importance.

The Challenge. Economists have historically had a challenging time determining the value of agriculture and the contributions that it makes to a jurisdiction’s economy. There are several reasons for this.

One is because several of the traditional sources of data that economists rely on are not necessarily available. Farming/ranching are not licensed activities (except for specialty areas such as certified organic agriculture) and food (which is the State’s principle agricultural crop) is not taxed. This means that economists have no central source of data for things like employment numbers, tax collections, and revenue production.

Another challenge is that data that is readily available is incomplete and often out of date. At the federal level, the US Department of Agriculture conducts an agricultural census only once in five years. Participation is voluntary and the information that USDA receives is limited to that which producers are willing to provide. At the state level, the Washington State Department of Agriculture maintains two maps online that show agricultural employment numbers and economic production levels by county. However, WSDA limits its data collection to just a few commodity crop categories and, for reasons that are unclear, inflates its economic production numbers by using a multiplier of five. At the local level here in Thurston County, agriculture has been largely ignored. The Thurston Economic Development Council publishes an annual Economic Vitality Index which barely mentions agriculture and has treated it inconsistently from year to year.

A third challenge for economists is the differences in agriculture between eastern and western Washington State. Much of the former involves commodity crops that are grown and sold in large lots which are relatively easy to track and assess. Agriculture in Western Washington however is more heavily weighted towards 'market gardening' which involves smaller farms and direct sales to consumers.

Thurston County has a large and growing agricultural community but few producers of any size (poultry and egg production and horticulture). A recent survey by WSU Extension shows that the number of farming operations is increasing but farm size is dropping.

The public's view of local agriculture and its importance has also changed. There is a renewed interest in fresh, locally produced food which has supported the rebirth of local farming and prompted the reemergence of local farmers markets, community-supported-agriculture (CSA's), and other venues where farmers can sell directly to the public.

All of these things mean that local agriculture in Thurston County and around Western Washington is growing and its contribution to our local economies is increasing but at the same time, the contributions are becoming more difficult to measure using traditional means.

This is a snapshot of some of the challenges facing economists who are brave enough accept the task of defining and measuring a local agricultural economy west of the Cascades.

The Approach. To meet this challenge, economists have to develop some new and innovative methods for assessing the economic value of local agriculture and especially food production. Central to this recommendation is the suggestion that economists should identify several "currencies" to base their calculations on.

Food production is the largest and most important part of agriculture and food itself represents a fundamental value to our civilization. Food provides the nutrition that is essential for life and the calories that are required to maintain a diverse society. Unlike automobiles or retail stores, food is something that everyone needs and no one can do without.

Ironically, the vital importance of food is counter-balance by its abundance and relatively low cost.

Since WWII, food has become very available and its price has dropped dramatically. Lower cost production methods nationally and increased access to cheap imported food have allowed the American family to spend considerably less on food today compared to 50 years ago. Therefore, if an economist were to determine the value of food using just a monetary standard, s/he would probably have to start with the price that it could be purchased for at Costco.

This is both deceptive and dangerous. It is also shortsighted because traditional importance of food has not diminished and the world is an uncertain place. This is perhaps why social concerns and other non-monetary values have prompted consumers to pay more for food which is locally produced and/or organically grown.

Therefore, a useful approach for calculating the value of a local agricultural economy requires at least two "currencies" – one based on a traditional monetary standard that reflect prices and costs, and another other using non-monetary standards that reflect the broader social values that local agricultural production represents.

This "two currency" formulation can be applied fairly simply using a dual track approach.

The first track involves a traditional market analysis using local data. Developing a data collection methodology should be a dynamic process and should start with information that is readily available and easily gathered, such as sales information from farmers markets located around the county. The breadth and depth of this data will grow as economists learn more about our local agricultural economy and become comfortable working with it.

The second track relies on a narrative process which seeks to identify the social values that local agriculture and food production represent. Examples of such values include things like the availability of local food supplies in the case of a disaster and the adequacy of access to fresh, clean, locally grown or organically produced food. These values can be identified and rated by conducting public surveys and focus groups. Capacity and adequacy can be determined at the same time. Once an initial list is created, it can and should be periodically updated.

This dual track approach should provide economists with an innovative yet relatively simple way to establish a value for local agriculture and determine its impacts on a local economy. This in turn will provide Thurston County and its VSP program with a means to determine the viability of its local agriculture economy and gauge whether it is growing or shrinking.

1.2.2.3 Statutory Definitions that apply to Voluntary Stewardship Programs

RCW 36.70A.703 (1): Agricultural activities" means all agricultural uses and practices as defined in RCW [90.58.065](#).

RCW. 90.58.065 (1): The guidelines adopted by the department and master programs developed or amended by local governments according to RCW [90.58.080](#) shall not require modification of or limit agricultural activities occurring on agricultural lands. In jurisdictions where agricultural activities occur, master programs developed or amended after June 13, 2002, shall include provisions addressing new agricultural activities on land not meeting the definition of agricultural land, conversion of agricultural lands to other uses, and development not meeting the definition of agricultural activities. Nothing in this section limits or changes the terms of the *current exception to the definition of substantial development in RCW [90.58.030](#)(3)(e)(iv). This section applies only to this chapter, and shall not affect any other authority of local governments.

(2) For the purposes of this section: (a) "Agricultural activities" means agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation;

(b) "Agricultural products" includes but is not limited to horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within twenty years of planting; and livestock including both the animals themselves and animal products including but not limited to meat, upland finfish, poultry and poultry products, and dairy products;

(c) "Agricultural equipment" and "agricultural facilities" includes, but is not limited to: (i) The following used in agricultural operations: Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including but not limited to pumps, pipes, tapes, canals, ditches, and drains; (ii) corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands; (iii) farm residences and associated equipment, lands, and facilities; and (iv) roadside stands and on-farm markets for marketing fruit or vegetables; and

(d) "Agricultural land" means those specific land areas on which agriculture activities are conducted.

(3) The department and local governments shall assure that local shoreline master programs use definitions consistent with the definitions in this section.

1.2.3 Two Economic Models to Measure Agricultural Viability

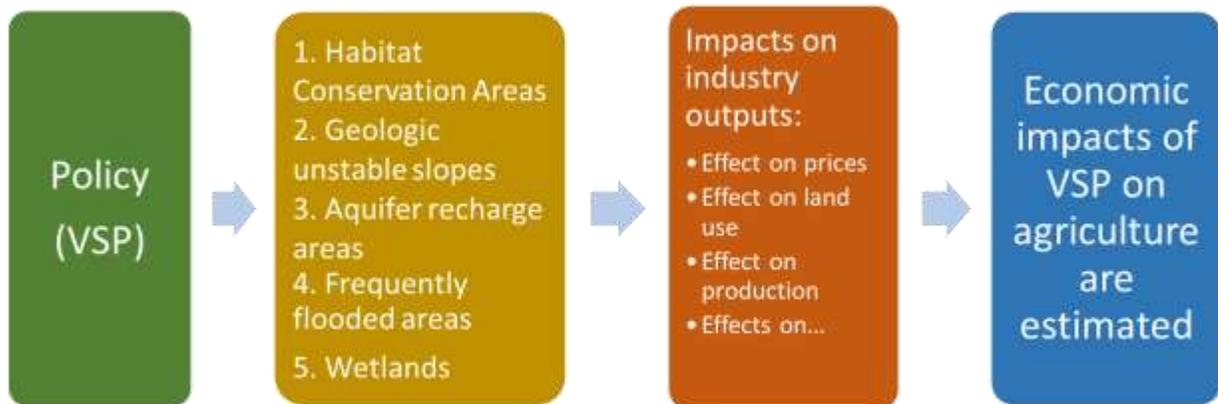
Two economic modeling tools were proposed by WSU economists, both compatible with local data collection proposed in Part 6 of the agricultural viability subcommittee research plan. The two economic models differ in how directly they measure effects of specific policy impacts of VSP.

Options:

Economic models

1. Economic impact/contribution analysis: Overall impacts of/contributions to economy of Thurston County agriculture. This analysis is general and reflects more than just specific legislation. It is not responsive to specific policy. Fairly easy to do, and 2-3 months to complete. Could be annually/biannually per step 6 in ag viability subcommittee research plan.
2. Assessment of economic consequences of specific policy (Computable General Equilibrium): This approach summarizes how specific policy affects industry outputs. Critical areas management policy (such as to manage geologically unstable slopes, critical habitat, aquifer recharge, riparian areas) may have such effects on industry output as: price affects, tax implications, or output curtailment. This approach takes longer, is more expensive, but specifically targets the impact of policy on agriculture.

Economic modeling option #2: assessment of consequences of specific policy on agriculture



Basic flow of impacts that are modeled

Sample study, I-732: <http://ses.wsu.edu/wp-content/uploads/2016/04/WP2016-8.pdf>

1.3 Thurston County SWOT Analysis on Ag Viability

This is a general analysis of strengths, weaknesses, opportunities and threats (SWOT) to the agricultural community. This analysis comes from the [WSDA Ag Viability draft](#) and is supplemental to the work and definition that Thurston County has already drafted surrounding our unique agricultural community. This [SWOT analysis](#) identifies **strengths**, or areas which the County is already doing to support agriculture; **weaknesses**, or areas where the County is not doing enough towards agriculture; **opportunities**, or areas for which the County can improve on to support agriculture; and **threats**, potentially harmful factors to agriculture in the County. Some of these items may overlap. For example, an area of weakness could also be an area of opportunity. This list is not intended to be exhaustive.

1.3.1 Land Resources

1.3.1.1 Strengths

- Open Space Farm and Agricultural Conservation Land (Commissioner's) & Open Space Current Use Farm and Agricultural Land (Assessor's). These programs are an incentive (through tax-reduction) to maintain land as agriculture, or keep land as farmable. They do not act as a permanent protection from development.
- Agricultural and Conservation Easements provides protection of farmland by permanently limiting the use of land to its agricultural or conservation value; Thurston County has 2,095 acres currently protected.
- Fee Simple Purchase by land trust or conservation agency preserves land; currently 302 acres protected
- PDR and TDR programs allow land owners to either retire development rights or sell and send development rights to a designated area; currently 942 and 181 acres enrolled.
- Long-Term Agricultural zoning designates areas where agriculture is the primary use. Currently there are 12,320 acres under LTA zoning. This conserves agricultural lands of commercial significance, protects land from incompatible development, and encourages continuance of agriculture.
- Conservation Futures uses tax revenues to purchase lands – sometimes farmland. Currently \$1 million per year.
- Washington Wildlife and Recreation Program (WWRP) Farmland Preservation and USDA Resource Conservation Services ACEP are competitive grants for purchase farmland easement to ensure that the land remains in farmland. There is currently \$4 million per biennium statewide & \$700,000 statewide respectively.

1.3.1.2 Weaknesses & Threats

- Conversion of farmland - growing bedroom communities in Yelm, Rainier, Bucoda and Tenino result in rural growth. Rural land is frequently used for agriculture within Thurston County. Poses many threats including risk of development, non-conforming uses, etc.
- Agriculture Critical Area Ordinance under TCC 17.15 (i.e., buffers surrounding critical areas can minimize the amount of farmable land that a property has, compared to without)
- Loss of fertile soils. Potential threats include erosion, loss of microorganisms, and greenhouse gas emissions. Topsoil erosion can deplete soils ability to sustain crops.

1.3.1.3 Opportunities

- Agricultural and Conservation Easements – more money to county, state, or federal to secure lands under easements.
- Fee Simple purchase – more money to county, state, or federal to secure lands under easements.
- PDR & TDR programs – more funding, increase awareness at County level

- Rural Resource Cluster Development – clusters residential lots in a development and sets aside 60-90% of the land into a large resource parcel; currently 875 acres are protected/enrolled. A policy change at the County level and increased awareness is required to improve success.
- Open Space programs – increase awareness and reduce fee could allow for more [current farmland] to be enrolled in the program.
- Long-Term Agricultural zoning could be expanded by adding land to this zone, done at the County Level.
- Conservation Futures uses tax revenues to purchase lands – sometimes farmland. Currently \$1 million per year; an additional \$400,000 per year could potentially be added by increasing taxes with Thurston County voter approval. This money may also be used for other resources (HCP) in the future. Adding farmland to the ranking criteria could help make securing farmland a priority.
- WWRP and USDA ACEP Farmland Preservation Grants – increase awareness and provide assistance to farmers applying for the grant (County, EDC??, SSCFLT??)
- Farm Bill conservation programs are an opportunity to save soil by helping with financial assistance to improve conservation practices, conserve working lands, etc. Could be coupled with VSP.

1.3.2 Water Resources

1.3.2.1 Strengths

1.3.2.2 Weaknesses & Threats

- Rapid growth of urban populations in Lacey, Tumwater, Yelm and Olympia (as well as the UGAs) puts stress on water rights and supply.
- Pollution can come from many sources including smokestacks, wastewater treatment plants, urban runoff, and pesticide and fertilizer runoff.
- Already existing low in-stream flows to many of the watersheds requires a response... the response walks a fine line between maintaining instream flows, providing water rights for public, farmers, and tribal, and protecting what depends on instream flows.
- If you don't use all or a portion of your water for a period of 5 years, your water rights may expire and you can lose them (relinquishment or abandonment, but relinquishment is more common). This could cause waste of water, in general, by some folks diverting water just to use water rights other than applying it to a beneficial use.

1.3.2.3 Opportunities

- Water conservation measures for dry seasons and in the face of stress on water availability. Assistance in implementing irrigation measures.
- Take climate change into consideration when planning future projects that may require water rights, encourage sustainability.
- Encourage, more widely and to the public, an efficient use of water resources (possibly by discussing future consequences). Continue to increase annual reduction targets of per-capita use within the cities.
- Work on the "[Use it or Lose it](#)" Policy with the department of ecology and the WSFB/TCFB, specifically in respect to farmers, to avoid relinquishment of water rights. Work with farmers (WSFB) to maintain their water rights and protect from relinquishment, even if they are not using the full amount for five or more years.
- Work with farmers to utilize the Trust Water Rights Program, which not only protects from relinquishment, but also helps to contribute to stream flow and could result in payment while water rights are in trust.

1.3.3 Regulatory Risk Management

1.3.3.1 Strengths

- Protection of resources that may be deemed important to agriculture, including land, water, labor, and energy.
- “Right-to-Farm” ordinance that allows, encourages and promotes agricultural activities in rural areas.¹ This protects farming practices and associated sights, sounds, traffic and odors. ([Ordinance 10398](#), passed 1993, Ch. 20.61)
- All of Thurston County’s rural zones allow for agricultural production, including Rural Residential, Rural Residential/Resource, Rural, and C Rural.

1.3.3.2 Weaknesses & Threats

- Regulations – add costs and divert resources that are needed towards their production; difficulty in agency guidance through regulatory complexity.

1.3.3.3 Opportunities

- More transparency and a streamlined permitting process for agricultural permitting within Thurston County.
- State and federal regulations (inspection services and warranties) can be burdensome and time consuming. These are important to ensure products are produced in a safe and healthy way, but they lack transparency and consistency. Improvement in transparency and consistency, especially to small farmers and in times of low market pricing, may be helpful.²

1.3.4 Infrastructure

1.3.4.1 Strengths

- WSU Extension offers small farm teams that have a list of resources to assist agricultural producers with, including farm business planning and direct marketing
- USDA Rural Development is local and can assist farmers in potential grant opportunities.

1.3.4.2 Weaknesses & Threats

- Public funding for infrastructure, educational outreach, and science and technology has not kept up with increased demands, rising costs, and need to renew aging facilities. Science and technology is vital to increasing productivity and reducing unit costs, and to helping farmers meet the increasing regulatory demands and the new certifications required by retailers.³
- Farmers in Thurston County identified a need for the following: cold storage, dry storage, washing and packing infrastructure, and other.⁴

1.3.4.3 Opportunities⁵

- Direct regulatory agencies to provide outreach and educate producers and processors about rule and regulation requirements. Increase efficiencies through providing concise, accurate summaries of applicable rules in writing.

¹ Rural Living in Thurston County. 2013. *Thurston Conservation District*.

http://www.thurstoncd.com/sites/default/files/u304/Rural%20Living%20in%20Thurston%20County%20revised%202013_FINAL.pdf

² Competitive Advantages of Washington Agriculture – Current and Future (2008). *Washington Department of Agriculture*.

<http://agr.wa.gov/fof/docs/Competitiveness.pdf>

³ Washington Agriculture: Strategic Plan 2020 and Beyond. (2009). *Washington State Department of Agriculture*.

<http://agr.wa.gov/fof/docs/FoFStrategicPlan.pdf>

⁴ South Sound Farms to Markets Assessment (2014).

⁵ All of these points are from the Washington Agriculture: Strategic Plan 2020 and Beyond, 2009,

<http://agr.wa.gov/fof/docs/FoFStrategicPlan.pdf> p. 46

- Direct regulatory agencies that have overlapping authority to meet annually to discuss industry compliance issues, share their educational outreach presentations, and to ensure the rules and interpretation of the rules are consistent.
- Establish a Blue Ribbon Panel to evaluate the impact of regulations on agricultural production, processing, profitability, and competitiveness, to mitigate duplication, contradiction, unintended consequences and other factors burdening the system.
- Implement streamlined application and reporting processes to minimize redundant paperwork and simplify applications for licenses and permits.

1.3.5 Market

1.3.5.1 Strengths

- Community Supported Agriculture in Thurston County allows consumers to pay the farmer a flat fee prior to the start of the season in receipt of products, assuming the same risks as the farmer.
- Several (6) robust farmers markets available throughout Thurston County as one way to get product to consumer.

1.3.5.2 Weaknesses & Threats

- No centralized or coordinated system in order to move product to market.

1.3.5.3 Opportunities

- Bountiful Byway is a scenic route that promotes agricultural tourism in rural parts of Thurston County. Agritourism along the Bountiful Byway will serve as an activity for local residents of Thurston County and an attraction to visitors from afar, as well as an opportunity to learn about local food supply.
- Direct-to-institution relationships are gaining increasing importance. Thurston County is centrally located to Seattle-Tacoma and Portland – two areas experiencing a resurgence in local food interest.⁶

1.4 Agricultural Roundtable Meeting

1.4.1 Background

In 2011, the Washington State Legislature amended the State's Growth Management Act (GMA) and authorized counties to develop voluntary, flexible programs for meeting GMA goals while avoiding the adversarial attitudes and litigation that regulatory approaches have encouraged.

The new program, entitled the Voluntary Stewardship Program (VSP), invited counties to "opt in" and when they did so, required them to create a VSP Work Plan that balanced protecting critical areas with supporting/ enhancing local agriculture. The Work Plan also had to include metrics and benchmarks to help determine whether these goals were being met.

Thurston County "opted in" to VSP in 2012 and in 2013 became one of two counties (along with Chelan) that received funding for a VSP pilot project. In 2014, the County created a VSP Work Group of local stakeholders and asked them to develop a draft Work Plan for the program.

The Work Group participants met regularly over the next 2 ½ years and in their efforts to draft a VSP Work Plan they discovered that there was a great deal of data available for critical areas and how to protect them, but little information about local agriculture and how to "support and enhance" it.

⁶ Direct Sales Farm Map by the Community Farmland Trust, 2016 <http://www.communityfarmlandtrust.org/2016-direct-sales-farm-map.html>

Therefore, the Work Group appointed an Agricultural Viability Subcommittee and asked it to address this situation.

Starting in 2015, the Subcommittee reviewed available data and consulted with economists, educators, agricultural producers, and others. In 2016, the Subcommittee determined that for local agriculture to be viable, it needed a diverse agricultural economy to support it. This however raised several important questions:

What is Thurston County's "agricultural economy"? How can it be defined and how can it be valued?

To help answer these questions, the Subcommittee invited agricultural producers and businesses to a work session on Feb. 25, 2015 and based on their feedback, identified five critical elements that are necessary for 'agricultural viability' – 1) Land, 2) Water, 3) Infrastructure, 4) Regulatory Reform, and 5) Access to Markets, Finance, and Information.

The Subcommittee also created a twin track approach for assessing the "value" of local agriculture which looks at both the market value and the social or community values that local farming and food production represent.

Market value is the financial impact that an industry sector has on an economy. It relies on monetary standards and mathematical formula to define the sector and determine whether it is growing or shrinking.

Social/community values on the other hand represent the non-monetary benefits that an activity like local agriculture provides to our community. These values are more subjective in nature and help to explain why community members believe that local agriculture is important; why they are willing to support local farms and purchase local produce, often at higher prices, rather than buy cheaper, imported food from discount outlets.

Social values then serve to counter-balance and sometime contradict market values. When they are combined and used as the basis for an economic study of local agriculture, the study's conclusions are likely to represent a more accurate and complete assessment of value.

During its review, the Subcommittee also discovered that existing data on local agriculture was incomplete and often out of date. Therefore it set about developing approaches for collecting and analyzing better, more comprehensive data. To do this, it collected what data was available and then organized a second work session of local agricultural producers and businesses to ask them for their input.

This meeting took place on February 16, 2017 and attendees included large and small acreage farmers and ranchers from around the county. They represented producers who engage in commercial, charitable, and subsistence agriculture.

These producers raise row crops, tree and vine fruit, and non-food produce such as lavender. Dairy farmers, beef and hog producers, fish farmers, chicken farmers, and other livestock producers were also present as were wineries and distilleries, horticulturalists, aquaponics, forest and timber interests, and bee keepers. Ag-related businesses included local chefs and restaurants, feed stores, equipment sales, pumpkin patches, and farmers' markets.

Commercial agricultural interests included those who make direct sales to the public and indirect sales to resellers, who create value-added products (such as fruit jams) and who engage in related activity such as agritourism.

Subcommittee members facilitating the work session offered a set of working definitions (included in the appendix below) and asked this group for their input on three questions:

1. What are the components of the “agricultural economy” that exist here in Thurston County or in the South Puget Sound area?
2. How should we put a value on local farming and food production? How do we assess the ‘market value’ (dollars and cents) and the ‘social or non-market value’ (fresh, locally grown produce, food security, etc.) of the agricultural economy?
3. What is the best way to approach local farmers and ag-related businesses to gather additional information about these things?

The following is a summary of the input received with some context added.

1.4.2 Agricultural Economy

Agricultural viability requires a healthy and growing agricultural economy that supports local farming and provides farmers with a reasonable return on their investment of time and money.

An agricultural economy is best defined by the interdependent relationships that exist within it.

The “currencies” used in an economy study of local agriculture must represent both the monetary and non-monetary values that agriculture represents.

A. Economic Basis for Agriculture. A preeminent point that was made by the workshop participants was that local agriculture needs a healthy and growing agricultural economy to support it. The participants said that Agricultural viability is a conversation about economic sustainability.

Further, in order to have this conversation, we need to have current, comprehensive data about local agriculture and then criteria for analyzing it. At present, neither of these things are available in a meaningful fashion. Therefore, VSP’s challenge is how to obtain good data, analyze it, and then use it to develop a comprehensive picture of the local agricultural economy.

B. Relationships. One reoccurring theme of the work group discussion was that an agricultural economy relies on and is made up of relationships. These relationships include:

- with the land, water and the environment generally;
- with other producers;
- with customers and consumers;
- with providers of supplies, tools and machinery;
- with transportation modalities;
- with health care providers (both for humans and animals);
- with educators and sources of knowledge/information;
- with the financial and insurance industries;
- with sources of legal advice and assistance;
- with governments that make provide services, develop public policy, enact laws, assess taxes, and enforce regulations;
- with the communities that local agriculture supports and preserves.

This list is essentially a snapshot of what an agricultural economy is and helps to answer question 1 above. Therefore, in order to assess its health and determine its value, these relationships have to be understood and accounted for. This feedback from the work session participants served to validate the Subcommittee's preliminary findings on this subject.

- C. Return on Agriculture.** Another theme was that agriculture, especially food production, was not limited to just commercial sales. Rather, barter-based transactions, subsistence production which feeds the farmer and his/her family, and charitable agriculture that helps those in need have to be accounted for as well.

1.4.3 The Value of Local Agriculture

The worth of local agriculture must be expressed using both market and social/community values. Economists need new tools for determining the contributions that local agriculture makes to both the local community and its economy.

The value created by local agriculture is not limited to commercial production but also includes charitable and subsistence production.

New approaches are need for collecting and analyzing data about the value of local agriculture. Current data collection practices are inadequate and existing information is incomplete and usually out-of-date.

Agriculture includes both market garden production and commodity crop production.

A. Economists and Agriculture. Economists have traditionally had a difficult time analyzing the value of agriculture for several reasons.

1. The "Hobby Farmer" paradigm. Historically, agriculture has been made up of two different forms of production:

- 1) "Market Garden" Production --generally, fresh food grown locally for direct sales to consumers.
- 2) "Commodity Crop" Production-- generally, industrial scale production of export crops that are sold to resellers rather than directly to consumers.

In essence, market gardeners have fed local communities while commodity crop growers have produced foodstuffs that serve as trade goods in long distance commerce.

Until the beginning of the 20th century, "market gardening food sheds" were limited to a radius of about 20 miles and urban communities intuitively understood the value of local farms. If local farms did not produce food (as well as fiber and fuel), local communities did not eat.

However, with the development of improved transportation, communication, and food preservation technologies, these food sheds became regional, national and then international in scope. As a result, cheap imported food became increasingly available and the value of local agriculture declined as urban communities no longer needed local farms in order to eat.

Conversely, the development of national/international food sheds have encouraged the growth of commodity crop farming. Increased markets, government subsidies, development of high-yield seed varieties, and growing reliance on high-powered synthetic fertilizers, herbicides, and pesticides have all contributed to its growth. The rise of corporate farming, the consolidation of farmland ownership, and the increased mechanization of agriculture are also contributing factors.

So now when economists, policy-makers, and even some farmers attempt to discuss "agriculture", they tend to focus primarily on commercial production of commodity crops and dismiss market

gardening and small acreage production as “hobby farming”. They also usually ignore charitable farming and the agricultural tradition of feeding those in need.

But these 20th century attitudes are proving to be outdated as 21st century trends in agriculture are showing that local farming is reestablishing itself. According to Federal and state data, small farms are now one of the fastest growing segments of US agriculture and farm size is shrinking. Nationally, small farms make up 91% of all farms and account for half of the farmland in the US (USDA 2007). A recent survey by WSU Extension here in Thurston County found that farm size had fallen from approximately 40 acres in the late 1970’s to under 10 acres today.

“Market garden food hubs” are again emerging and markets for locally grown food are multiplying. This can be seen in the renewed interest in cooking with raw ingredients and the rapid growth of local farmers’ markets, direct buying programs, and institutional sales that emphasize sourcing food locally.

All of these things help demonstrate that communities are rediscovering the value of local agriculture and that the casual dismissal of local market gardeners as “hobby farmer” is not only misguided, but also serves to obscure the value that local agriculture represents.

2. Lack of Data. Economists rely on data that is collected by government agencies as one of their primary bases for developing economic assessments. Tax and income information as well as professional licensing and employment data are three primary data sources and this information is usually inexpensive, readily available, and thought to be reasonably reliable.

However, in Washington State food is not taxed and farming is not licensed (with the exception of organic farming). In addition, many small acreage farms are family operations that have few if any employees, relying instead on volunteer assistance and interns to fill in the gaps in their labor force. Therefore, data that is typically available for other businesses categories may be unavailable for farming and agriculture.

In addition, current government surveys of agriculture provide data which is incomplete and often out of date. A primary source of survey data, the USDA Agriculture Census, is a voluntary program in which farmers may or may not participate and it contains data categories that are more relevant to commodity crop production. Further, the Census takes place only once every five years and offers data that is out of date 80% of the time.

This lack of data has encouraged economists and economic development councils to marginalize the value of local agriculture and largely ignore it when developing local economic surveys.

3. Market Values vs. Social Values. Perhaps the greatest challenge for economists attempting to assess the value of local agriculture is the limitations inherent in their reliance on “market value” approaches to assessing value. The working definitions below define an “economy” as the process or system by which goods and services are produced, bought and sold. Therefore, economists tend to focus their analysis on material wealth and commercial transactions.

As discussed above, a market analysis is an important tool for determining the value of local agriculture, but it cannot capture all of the value that farming and food production represents. Food and the ability of a community to feed itself are fundamental to any organized society and many of the values represented are essential but cannot be easily reduced to a market analysis. These “social” or “community” values cannot be judged in dollars and cents but rather involve the health and welfare of families and the communities that they live in.

For example, what is the worth of having locally grown food for consumers who want to know their farmers and be assured that the food is fresh and wholesome. What is the worth of having

local agricultural production and food resources (like the county food bank) to address concerns about food security if the international food hub that we presently rely on is interrupted by natural or man-made disasters.

These social values are more subjective in nature and don't lend themselves to numeric formulas and dollar-based analysis. Rather they are best assessed through continuing community discussions which identify the respective values, indicate their relative worth, and periodically determine if the "wealth" that they represent is increasing or declining.

4. Social/Community Values Identified by Work Session Participants. Work Session participants identified the following social/community values as being important for any valuation study of local agriculture:

- Health and nutrition / Access to wholesome food
- Fresh, better tasting food
- Access to raw food (vs. processed and packaged foods)
- Organic and non-GMO options in buying food
- Helps maintain genetic diversity by growing heritage crops and local land races
- Know your farmer and know what you are eating
- Knowledge of how food is grown (farm visits, U-pick, volunteerism on farms)
- Better food for local schools and hospitals
- Growing food for charity and helping those in need (County Food Bank, Gleaners, etc.)
- Community opportunities for all ages to work on a farm and help maintain Good Stewardship of the Land
- "Agri-therapy" for retired military who are struggling with PTSD or other issues
- Youth programs (like GRuB's contract with local high schools to provide agriculture-based alternative education, employment, & drop-out prevention programs)
- Vocational and job training for careers in agriculture, soil science, water resource management, food production, etc.
- Builds community relationships, encourages networking and promotes positive relationships
- Maintains Rural Lifestyles, Culture, and Heritage
- Harvest festivals and social activities
- Opportunity to support local farmers and their families
- Food Safety, Food Resilience and Food Security
 - Avoids imported food that may be unwholesome,
 - Helps prevent agri-terrorism,
 - Maintains local food supplies and reserves in the case of man-made or natural disasters
- Maintaining farmland preserves the natural environment
- Open Space and Habitat preservation
- Maintain Aquifer Recharge areas
- Helps prevent urban sprawl
- Lowers taxes and the need for public services
- Smaller carbon footprint

- Helps address global warming
- Local purchases keeps money local – increases local economic activity and supports tax base that funds government services
- Encourages value-added products and start-up businesses
- Agritourism
- Helps to develop a Thurston County “brand”

1.4.4 Data Collection Alternatives

The best source of information about a local agricultural economy is the producers and agricultural-related businesses. Other sources include feed stores, equipment sales, and other businesses who know their customer.

Consumer population surveys may be another means of collecting data.

Outreach is a primary challenge for data collection.

Confidentiality is a second challenge.

Recommended approaches for dealing with these challenge:

- *Work through trustworthy organizations (WSU Extension, Thurston Conservation District, USDA/NRCS) and professional agricultural associations (Farm Bureau, Tilth, Young Farmers, etc.) to survey producers.*
- *Collect information in a manner that protects privacy.*
- *Seek statutory protections for the information collected.*

1.4.5 Invitation Flyer

Please Join Us

For the Thurston Voluntary Stewardship Program Pilot Project's

Work Session on Agricultural Viability

Thursday, February 16th / 4:00 - 6:00 p.m.

Host:

Thurston Voluntary Stewardship Program (VSP) pilot project and its Ag Viability Subcommittee

Date/Location:

Thursday, February 16, 4:00 – 6:00 p.m.

Thurston Regional Planning Council Office - 2424 Heritage Court SW, Olympia, Washington

Overview

The Thurston County Voluntary Stewardship Program (VSP) needs your help!

It is finishing a Work Plan that creates a voluntary process for meeting the two goals of the Growth Management Act which are 1) supporting/enhancing local agriculture and 2) protecting critical areas. Once the program is implemented, VSP will serve as an alternative to regulatory enforcement and potential associated adversarial approaches that in the past have resulted in litigation.

The draft VSP Work Plan has identified six critical elements that are necessary for 'agricultural viability' and determined that a healthy 'agricultural economy' is essential for supporting local farming/ranching and the businesses that sell to or buy from agricultural producers. Now we need your help in figuring out how to further define some of these terms.

We also need your help reviewing data collection decisions that will be used to implement the VSP agriculture viability plan in Thurston County.

Questions to address

4. What are the components of the "agricultural economy" that exist here in Thurston County or in the South Puget Sound area?
5. How should we put a value on local farming and food production? How do we assess the 'market value' (dollars and cents) and the 'social or non-market value' (fresh, locally grown produce, food security, etc.) of the agricultural economy?
6. What is the best way to approach local farmers and ag-related businesses to gather additional information about these things?

If you need further information, please contact:

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360-754-9851

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360.741.2522

1.4.6 Working Definitions used for the Agricultural Roundtable

In order to facilitate the discussion, the Subcommittee suggested working definitions for the following terms:

“Agriculture” -- Generally, the production of food, fiber, and fuel.

“Economy” -- The process or system by which goods and services are produced, bought and sold. (Merriam Webster Dictionary)

“Agricultural Economy” -- The relationships and interactions among agricultural producers and with those who buy from and sell to them.

“Forms of Return on Agricultural Production” -- The return created by agricultural production includes the following:

- **“Subsistence production”** -- Growing agricultural products for consumption by the producer and his/her family.
- **“Charitable production”** -- Growing agricultural products to help those in need.
- **“Commercial production”** -- Growing agricultural products for sale

“Commodity Crops” -- Crops that are not sold directly to the public and which are typically grown in vast quantities on large tracts of land using industrial methods.

“Hobby Farming” -- A derogatory and misleading term sometimes used to describe market gardening and small acreage agricultural production.

“Market Gardening” -- Growing crops (usually fruits, vegetables, and flowers) in modest amounts usually on small holdings for direct sale to consumers.

“Value” -- Usefulness or importance.

1.4.7 Agricultural Roundtable Meeting Minutes

Note: These are the notes from the VSP Ag Viability Subcommittee’s first Agricultural Producers meeting in 2015 that is referenced in the text above. JG

VSP Agricultural Community Notes

02/25/2015

What farmers need to run their operations and be successful:

- There needs to be recognition that AG does benefit habitat.
- Improvement to access
- Road improvements (shoulders for moving ag equipment without affecting traffic negatively)
- Rules/Protection from regulatory rules

- Developed BMPs that farmers can use without the need for technical assistance
- Broad spectrum look at impacts to all species – one is not more important than the other
- Ability to grow crops/nuts/fruits within the buffer areas (critical areas)
- Technical advice and funding to help implement those.
- Ability to expand farmland
- Address the cost of permits on agricultural lands (farmers need to be able expand/add ag structures needed on a very tight budget in order to be successful farmers)
- Access to markets
- Respect and appreciation for what the farming community does (regulators/public)
- Economic impacts are immediate, environmental impacts take longer
- Regulators should have the burden of proof (they need to prove any negative impacts AND share the positive impacts...prove the source of contamination)
- The disconnect of people is when the harvest occurs (they look at the impacts on the ground during that cycle, rather than the long term benefits of ag on the land)
- Farmers need a reasonable return on investments
- Need credit for what farms have contributed (access to hunting/recreation)
- Agricultural is a declining resource – Transfer of Development rights needs to be revamped and made available to keep ag lands working
- Ability to be diverse (sell on site, grow unconventional crops, etc.)
- Need a County Ombudsman to help farmers sort through rules/regs (one stop shop) when establishing a farm, making changes, etc.
- Mitigation banking could be beneficial
- Help growing the middle sized farms (need marketplace/access to local markets)
- Local cold storage and processing
- Education for new/beginning farmers
- Need middleman/clearinghouse for buying power
- More city lot farming

Barriers:

- Regulations
- Land cost
- Water availability
- Lack of infrastructure
- Lack of markets (for small farms)
- Inability to maintain ditches/dike (currently requires permit)
- Health Dept. rules (expensive kitchens/restrooms, etc)

Other Thoughts & Ideas

- Need environmental interest groups involved in this process.
- More diversity for selling ag products - should include more small farms (nuts/fruits) with more access to markets (such as hospitals)

- Need to look at how the VSP plan will be monitored (water quality, critical areas, etc.)
- Need balance between farms and protection (LOTT is buying up farmland in an effort to restore wetlands)
- Retail should buy local foods (policy changes needed)
- Why is there sales tax on seed? Seed is food, shouldn't be taxed
- Conversation to ag zone takes too long – shouldn't be more than a year
- Recognition that engineered habitat is all right – habitat is habitat
- Farms **are** critical areas – we all need to eat
- Need to increase local food production that is kept here by 25% in the next 5 years
- Focus on paradigm shift – low cost options are needed.
- Reward officials for being collaborative
- Need open dialogue with fellow ag fold so we're all on the same page with communications, networking, and mentoring
- Look at the definition of agricultural in the Thurston County Working Lands Strategy
- Not all farmers know best – this is recognized by other farmers in the community.

1.5 Agricultural Viability Elements and Indicators Monitoring Matrix

Agricultural Viability Elements and Indicators

Agricultural Viability Elements	Agricultural Viability Indicators	Monitoring Method & Agency
<i>WAC 365-191-010: A county that chooses to participate in the program is required to develop work plans to protect critical areas while maintaining the viability of agriculture through voluntary, incentive-based measures.</i>		
<i>Ag Element-1. Land Resources – Agriculture requires adequate land with good soil to produce healthy crops of food, fiber and fuel. Businesses that support agriculture need an adequate base of productive agricultural lands to remain viable.</i>	<u>Indic-1.</u> Acreage of agriculture measured by: i) Ag activities that intersect with critical areas, and ii) Acreage of farmland from the USDA Census	Thurston County, watershed and countywide data from VSP mapping & USDA census
	<u>Indic-2.</u> Acreage of agricultural area use change	Thurston Conservation District, collected through stewardship plans at the site level
	<u>Indic-3.</u> Acreage in farmland protection programs, such as Open Space Farm and Ag, and designated agricultural land	Thurston County, countywide data (could be watershed)
<i>Ag Element-2. Water Resources – Agricultural production needs clean water to grow crops and farms/ranches need access to sufficient water resources in order to remain viable. Therefore laws must support farmers’ existing and future water rights and farms’ access to sufficient water quantity and quality.</i>	<u>Indic-4.</u> Water resources education and outreach efforts-tracked by the number of hits on a water resources clearinghouse webpage and/or the number of outreach materials distributed	Thurston County, Thurston Conservation District, countywide data
	<u>Indic-5.</u> Number of irrigation efficiencies implemented and structural/operational improvements to water infrastructure	Thurston Conservation District, Stewardship Plans
	<u>Indic-6.</u> Number of water rights certifications, claims, permits, and applications, as well as transfers, banking and similar water conservation efforts	Thurston County, obtaining data from ECY (watershed and countywide)
<i>Ag Element-3. Regulatory Reform – Producers need reasonable and predictable standards and streamlined processes to reduce time and costs</i>	<u>Indic-7.</u> Outreach to farmers: Number of technical assistance staff (TCD and/or Ag Liaison) available and resources provided to facilitate a better understanding of the current rules and regulations	Thurston Conservation District, countywide data
	<u>Indic-8.</u> Outreach to policy-makers: Number of efforts/resources provided to support and promote policy-makers and regulators understanding of agriculture related issues, regulatory pressures, and making needed reforms to maintain or enhance ag viability	Farm Bureau/Thurston County, countywide data
	<u>Indic-9.</u> Number of new or amended ag related regulations and how they impact agriculture	Thurston County/Farm Bureau, countywide data and narrative
<i>Ag Element-4. Infrastructure (Hard & Soft) – Agriculture needs “hard” infrastructure including transportation, water and waste utilities, access to markets and equipment. Agriculture also depends on “soft” infrastructure, or human capital and a healthy network of support, including training, education, research and technical assistance.</i>	<u>Indic-10.</u> New or improved agriculture infrastructure	EDC/WSU/Thurston County, countywide data
	<u>Indic-11.</u> Number of events or workshops for networking between farmers or between farmers and agencies	Thurston Conservation District/Thurston County, countywide data
	<u>Indic-12.</u> Number of assistance courses or educational workshops, number of pilot projects or demonstration events	Thurston Conservation District/WSU/Thurston County, countywide data
<i>Ag Element-5. Markets – Economic Viability of agriculture relies on the profitability of farm operations, including efficient production, diversification of agricultural products, direct marketing, value-added opportunities, available consumers, and agritourism.</i>	<u>Indic-13.</u> Number of farmers markets and/or CSA farm/sales	Thurston County, countywide or watershed
	<u>Indic-14.</u> Branding efforts to increase value of agricultural products (i.e. number of “VSP Good Steward” or other certifications)	Thurston County/Thurston Conservation District, countywide
	<u>Indic-15.</u> Market Value of Ag ⁷ (USDA Ag Census) and local farmers markets revenue	Thurston County, countywide

⁷ This is currently a resource available to estimate the market value. If more resources become available, or the agricultural economy is evaluated using the two-tier proposed plan, this data source may be substituted using information from that economic analysis.