



Exploring Ecosystem Services Market Potential in Local Communities: Designing Productive Outreach Efforts



South Central Washington Resource Conservation & Development Council

Yakima Basin Clean Water Partnership – RC&D Committee
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Exploring Ecosystem Services Market Potential in Local Communities: Designing Productive Outreach Efforts

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Ecosystem Services Markets

Our Nation's farms, ranches, forests, and other natural and open areas provide goods and services that are vital to society. These natural assets, including clean air, clean water, as well as places to grow food and raise families, are vital to our health and our economy. These assets are also referred to as ecosystem services. Ecosystems such as forests, grasslands, shrub-steppe, floodplains, wetlands, and rivers all provide services to communities such as water storage, flood protection, fish and wildlife habitat, and water for supporting our farms and homes.

Land managers help provide many ecosystem services, which have always been viewed as free benefits to society - clean water and air, wildlife habitat, carbon storage, and open spaces. Farmers, ranchers, and forest landowners are not generally compensated for providing these critical public benefits. Market-based approaches to conservation can be a strategy for providing adequate compensation for these additional benefits provided by landowners that also act as an incentive for retaining, improving, or restoring ecosystem services as well being an additional tool to help achieve environmental goals and sustain working and natural landscapes. Without financial incentives for conservation and restoration, these ecosystem services may be lost when lands are sold or converted to development.

At the same time, when ecosystem services have been greatly compromised, communities are faced with the task of finding solutions to restoring those services. An Ecosystem Services Market, or other Payments for Ecosystem Services options, can assist people who manage land and water in new ways. Markets provide land owners (sellers) with new options for generating revenue from management choices that improve water quality, increase water quantity, or increase habitat value. At the same time, markets provide land and water managers (buyers) with pragmatic alternatives for mitigating the effects of unavoidable environmental impacts.

Outreach

Developing an Ecosystem Services Market is a long and complex process, requiring the involvement of numerous stakeholders. The purpose of planning and implementing good outreach is to facilitate productive two-way communication that will help all facets of an issue become revealed and addressed. Through effective outreach, conservation entities become more informed about attitudes, needs, and concerns of leaders and stakeholders in and beyond your community. This information can help them design their deliverables in a way that truly provides benefits at the local level. When exploring, designing, or implementing an Ecosystem Services Market, a well thought out outreach effort will be critical to success.

This document outlines steps for consideration in outreach that focuses on an Ecosystem Services Market, quantification of ecosystem services, or other payment for ecosystem services option, that centers on water quality. Many of the concepts likely apply to other market based conservation efforts as well, but stem specifically from the efforts of the Yakima Basin Clean Water Partnership over the last year of working on proactive water quality efforts in the Yakima Watershed.

This document was made in conjunction with the 'Yakima Basin Ecosystem Services Market Analysis', Report Number 2012 – 02, the 'Yakima Basin Point Source Watershed Assessment', Report Number 2012 – 03, and the 'Floodplain Supply Analysis', Report Number 2012 – 04. All four documents were funded by the Natural Resource Conservation Services and completed by December 31, 2012.

Do You Really Need an Ecosystem Services Market?

An Ecosystem Services Market (Market), also called conservation or ecosystem markets, is a tool that, when used appropriately, can help achieve water quality goals more effectively and efficiently, and is not meant to replace any existing conservation strategies (figure 1). This tool in the

conservation toolshed is only useful when it produces real and measurable conservation benefits, meets local needs, and provides additional benefits beyond what is already provided by other conservation strategies, such as federal grants or mitigation. Creating a Market for water quality trading requires a high level commitment of time, resources, and political maneuvering. Before heading down this path, and investing significant time, watershed managers need to discuss and answer the following questions:

- What are our most critical water quality needs and goals?
- What resources and/or plans do we already have to meet our water quality goals?
- Are those resources adequate and sustainable enough to reach long term water quality goals? If not, why not?
- Are there conservation needs that get overlooked by typical sources of funding, but where conservation actions could help reach desired results for water quality (i.e., non-salmon bearing streams)?
- Is there a need to better monitor and quantify the benefits of conservation actions or to better prioritize the use of limited conservation dollars?
- Are regulatory pressures likely to increase, possibly forcing communities to invest in significant investments in technology and grey infrastructure?
- Could there be significant increases in Best Management Practices (BMP) in non-point sectors if additional incentives were available?
- Is there support for Markets in your state and/or region?
- Are regulating authorities likely to acknowledge the market through either pre-compliance assurances or in a permitting process?



Figure 1. Ecosystem Markets are only one tool that can help reach water quality goals. They do not replace existing resources or relieve regulatory requirements (image courtesy of Willamette Partnership).

Markets are not always the best solution to specific conservation goals. Payments for Ecosystem Services, conservation quantification, and other strategies may be adequate for reaching specific goals, or addressing specific concerns, without the development of a fully functional market. An important question to answer is whether there is enough need for a full market with frequent and long-term trading, or are there just a few specific opportunities that could utilize a trading like scenario. A fully functional market may only be beneficial when it will support significant trading over a long period.

There have been many market driven efforts around the nation and world, some successful, some not. To review some of these efforts, as well as other research and reviews on this concept, refer to Appendix A for a list of resources.

Pulling Together Stakeholders

If after considering the above questions, there are strong indications that a Market for water quality trading could provide added value and water quality improvements over a long period, the next step is to form an initial stakeholder and scoping group. You must identify who should be at the table and include them in the very first meetings. This may include cities, counties, watershed management organizations, regulatory agencies, tribes, conservation advocates, agriculture representative groups, federal and state agencies, and other local and regional groups who may have the ability to help, or hurt, your efforts now or in the future. This first stakeholder group will typically include policy level leadership who have influence and interest in water quality for the community, state, and nation in the conservation and agricultural communities.

This initial stakeholder group will be tasked with deciding whether there are adequate conservation benefits of and political support for a Market, and should continue to consider the questions given in the last section. This group must also decide who else needs to be included in current and future discussions. If it is decided to pursue the development of a Market, then this group will be critical in its success.

Once the stakeholder group has decided to pursue the development of a Market, they should look to recruit technically qualified individuals to provide assistance, maybe serve on a technical subcommittee. This technical assistance will be critical in creating the scientific integrity the Market will need and provide the stakeholder group the technical information they need to make policy level decisions.

The stakeholder group will also need to identify and provide for necessary staff (and funding for that staff) that will be on-point for facilitating meetings, building partnerships, communicating with local and regional groups and individuals, gathering and organizing information, and other day to day tasks to keep the momentum going and provide consistent support for activities. If, and when, the components of a Market begin to be developed and utilized, additional, or differently skilled, staff may be needed. When considering sources of funding, think about:

- Who has the most to benefit from a Market? Would groups representing potential sellers and buyers be willing to provide either seed or long term funding? Groups might be agricultural representatives, cities, tribes, and others.
- How involved do regulatory agencies want to be? Federal and state regulatory agencies may provide funding through competitive grants or more discretionary funds.
- Who are the local and regional non-profits that are most interested in markets? Private conservation entities may have already identified Markets as one of their funding priorities. If not, talk with them to see if there is interest.
- USDA agencies, such as NRCS, may have both federal and state level competitive funding sources you can apply for. NRCS is currently showing interest in funding efforts at market development, but that interest may wane or focus on large regional efforts.
- Keep in mind that many funding sources want to see local commitment and match before they will usually be willing to commit additional funding. Raising local funding through MOUs or other means should be explored.

You may also want to identify a smaller subset of the stakeholder group to act as an executive committee. The executive committee should have the time and resources to provide more regular assistance to staff in areas of political guidance and support, or technical assistance. These individuals / leaders should be willing to do heavy lifting for the stakeholder group. The executive committee should be diverse to help in directing the different facets of the market, representing both conservation and agricultural interests. They also need to have an interest in supporting “new” or “cutting edge” approaches, as they can help relay the vision to new or cautious stakeholders whom may not have a full understanding of the Market, how it would operate, or who it would benefit.

Identifying the Purposes for Outreach

Early on in the development of the stakeholder group, and in the initial meetings, it is important to start asking critical questions up front to determine whether an Ecosystem Services Market is really feasible and likely to be supported in your watershed. Addressing these questions directly and early on will help save significant time over the long run. During the first meetings of the stakeholder group, they should address the following areas, and discuss the related questions:

Policy & Politics

- What policies exist in our state regarding water quality trading, and are they adequate to support a local market?
- What allies do we have to help create a more favorable atmosphere for the development of a market?
- What local, state, and national entities are, or need to be, involved and supportive of local and state efforts to develop a market?
- What entities or individuals are potentially going to pose the biggest challenges in market development and use?
- What efforts are already being made in our state to develop water quality trading markets, and do they involve a locally led approach?

Regulatory Atmosphere

- How familiar is the regulating agency, and their leadership and staff, with water quality trading or other payment for ecosystem services strategies?
- What policies, if any, do they have regarding trading, and do they support locally led efforts?
- How flexible and creative are they currently in the writing, interpreting, and executing permits?
- If they are not currently flexible, what support or information might allow them to better utilize markets in permit compliance or pre TMDL assurances?
- What state and federal regulatory staff need to be invited to meetings and kept involved in discussions?
- What local and state regulatory agency staff are willing and able to participate in stakeholder meetings and provide input and support?

Supply

- Who are the current or potential biggest suppliers of water quality benefit credits?
 - Individual private landowners, tribes, municipalities, other?
- What are the most beneficial conservation actions that these suppliers could provide?
- What water quality benefits would likely result from conservation actions?
- What tools are available, or needed, to quantify those benefits?
- What eligibility requirements should be required for participation in a market, for both supplier and conservation action?
- Will potential suppliers likely want to participate in a market?
- What incentives would be needed for the various conservation actions to be implemented?

Buyers

- Which point sources, or other potential buyers, have current or upcoming regulatory requirements?
- What will potential buyers need to do to become eligible to participate in a market?

- Is there enough of a regulatory driver to motivate potential buyers to buy credits?
- Are there potential non-regulated entities that would be interested in participating in the market?

Technical

- What credits and models developed elsewhere can be used or adapted locally?
- What conservation quantification tools are needed, and are there some already that can be used or adapted?
- What technical staff (local and elsewhere) need to be involved?
- What additional market metrics need to be developed?
- Who could serve as technical service providers for market participants?
- What monitoring exists or could be provided for credit development or benefit assurances?

Building Support

Audience - Who

Building support first requires identifying your audience. You may have evolving or growing audiences the further along in the process you get, so your message needs to be prioritized and timed carefully. Giving some people or entities too much information too soon can create unrealistic expectations and cause disappointment or distrust when there is no delivery. For example, discussing benefits of a Market to potential buyers before talking to regulators on whether they are willing to write trading into permits can cause frustration on both sides.

Potential audiences when targeting outreach could be:

- Regulatory agencies (DOE, EPA, Army Corps)
- Wastewater treatment facilities / municipalities
- Other point source dischargers (permitted)
- Landowners / potential sellers
- Landowner technical providers (CDs, Irrigation Districts, NRCS, others?)
- Policy agencies (federal, state, non-profit, other)
- Local and state government
- Other market participants (consultants, restoration organizations, land conservancies)
- Funding sources

Message - What

Your message must be tailored depending on the expected audience and your desired participation of that audience. Whether you are trying to build your first stakeholder group, gain political support, or solicit market participation, the message has to contain the information that specific groups need to make decisions you are asking of them. Staff should have help from the stakeholder group, and executive committee, or others to help them identify the audiences, and the correct messages to convey. This support can help staff avoid potential “minefields”, as well as how to get through them, when they cannot be avoided.

This document does not go into what messages need to be conveyed, as each situation is unique, but important things to remember are:

- Always know what the original purpose of developing the Market was – was it to have cleaner water or restore habitat? That goal should always be at the heart of all your outreach. Don’t allow your outreach to become so focused on creating the Market that stakeholders are unable to understand what the conservation issue is.

- Work with your stakeholder group to clearly define your conservation goals, and how you think a Market can help you meet them. Make sure as you talk to various audiences to keep your message clear and consistent. This can become challenging if different stakeholders have different goals, for example in the Yakima Basin some stakeholders are most interested in looking for opportunities to restore floodplain, others are interested in the quantification of benefits that result in their organizations primary activities, and for others they want to increase incentives for non-point source improvements. All of these goals can be met through a conservation market, but the overarching goal for the market must be agreed upon by all. In the Yakima Basin, that is getting to cleaner water.
- Know when to keep your message broad and visionary, and when to make it more technical and detail focused.

Message – How

Identify how you are going to communicate with your audiences. Various outreach tools include:

- Face to face meetings – these should be your most common outreach tactic and will accomplish a great deal more than phone calls or emails.
- Technology – website, emails, webinars, and conference calls can help you reach a broader audience and communicate more efficiently and regularly.
- Varied – ultimately you have to meet your audience using the tool they will respond to best.

Message - When

Timing of communication is critically important, as you need to figure out sooner than later who you need at the table early on or later. Getting the wrong people at the table early on can stall or even halt the process. Waiting too long to get other people involved can set you back as well. This is the same with your message, sharing too much information in the beginning with the wrong people can create misunderstandings about the market and your purpose. Waiting too long to share other information may have the same effect. Your stakeholder group should be able to help staff decide which messages to deliver, when, and to whom. Ecosystem Services Markets are a hot topic right now but can also be a controversial one. When looking for funding, technical, or political support, raising your profile can be the best strategy. Other times, keeping a lower profile is better. But it is always important to keep your message clear and consistent as well as focused on your conservation goals.

Desired Outcomes

Both in the beginning and along the way, you must identify some specific outcomes which will help you succeed and keep the stakeholders involved and motivated. These should include:

- **Workplan.** One of the early action items the stakeholder group should complete is the development of a workplan. This should include short term and long term goals identifying action items and individuals responsible for specific elements within those action items. This workplan should be revised as often as necessary to reflect the changing environment or technical understanding of the participants.
- **Technical Needs Assessment.** Early on, the stakeholder group must identify what technical resources are available and also identify what resources need to be developed. This will depend on your water quality goals and the conservation actions needed to address them. Identifying initial projects to fill in technical gaps should be part of the workplan.
- **Technical Projects.** Depending on the results of your technical needs assessment, you may identify projects that will help fill in data gaps. In the Yakima River Basin, a study looking at defining “reasonable” phosphorous treatment levels that Wastewater Treatment Plants should meet to become eligible for market participation was identified as important, as well as an inventory of floodplain supply and condition. These were both conducted in 2012 to provide

needed data for a market, but also have conservation and information benefit even if a market is not achieved here. In 2013, we will be working on calibrating the Nutrient Tracking Tool for use on a limited number of crops and management practices. Our goal is to decide whether this is the right quantification tool to fully develop for the basin and possibly the state.

- **Local and Regional Agreements.** Having an MOU or other agreements (see figure 2 for example) can help increase commitment of partners and participants and help address conflict or misunderstandings early on. This was an important milestone in the Willamette basin.

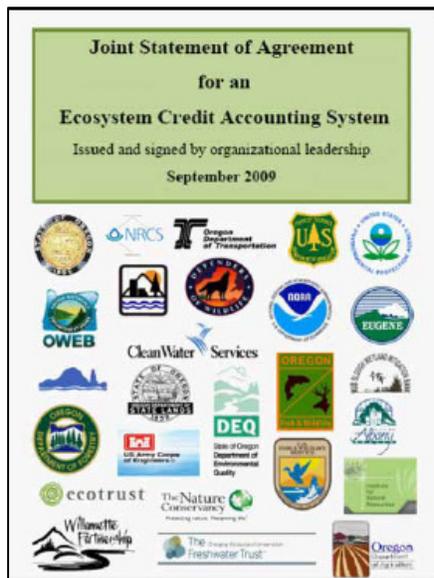


Figure 2. Joint Statement of Agreement developed by The Willamette Partnership, 2009.

- **Funding Commitments (local, state, or grant sources).** Upfront funding is critical to provide staff support, conduct technical studies and projects, and other activities. Early discussions need to identify and pursue appropriate funding. Local match sources also need to be identified and pursued and can be a critical part of solidifying local support.
- **Stakeholder Support.** Getting support from key stakeholders, such as regulatory agencies, either in the form of grant support letters or agreements, can be very helpful down the road. Their level of support will depend on their understanding of the trading concept and how it would impact water quality. Small steps, such as support letters for a funding application, can still be very helpful in the beginning. In the Yakima Basin, an early effort to apply for a large grant included a presentation to various conservation staff and stakeholders, as well as a request for letters of support. Although this initial funding application was not successful, the many letters of support and interest generated helped launch the Yakima Basin Clean Water Partnership and further funding applications, two of which were received in 2011 and 2012.
- **Identifying Pilot Projects.** Identifying and implementing a trade is often the initial goal, but can be difficult to implement without support from the many facets of a market, such as the regulatory entity. Potential pilot projects could be conducted without an actual functional market in place and can help clarify the true position of the regulating agencies as well as other stakeholders, and increase understanding of the challenges and opportunities for tradeoffs. In addition, pilot projects don't have to necessarily be a traditional "trade" that results in permit relief. It could be an agreement with the regulator to extend the timing of a permit, to allow for the pursuit of a better understanding of the nutrient sources. An agreement to conduct required research and a more effective nutrient reduction plan could be developed involving point and non-point sources. Part of the outreach process should be to look for where permit or water quality pressures are the greatest, and finding opportunities to develop better solutions than standard implementation of permits. Being flexible includes thinking outside of the box, not just of the standards permitting process but of standard market

processes as well. Some of these efforts can, and maybe should, be made without the existence of an actual fully functional market. In the end, the goal of making better decisions and better expenditures can still be achieved.

In Summary

If there are strong indications that an Ecosystem Services Market would help conservation entities and communities reach their conservation goals, good outreach from the very beginning will be critical to its success. Outreach has many purposes, including assembling the right people, identifying appropriate funding needed for support, working to develop proper policies, and soliciting support from entities that will need to be involved. Developing an outreach plan early on will help get you started in the right direction, but it will be important to be prepared to continually adapt to new situations, new information, setbacks, and success. Flexibility to work with new opportunities is important. It is also important to always remember the ultimate conservation goal. An Ecosystem Services Market may not always be the best solution, but the process of exploring a market may help conservation entities work together to develop new and innovative ways of reaching conservation goals.

The Yakima Basin Clean Water Partnership, to date, has not yet committed to the development of an actual market in the Yakima Basin. Various forces have made the initial efforts unsuccessful, and possibly unnecessary, at this time. But we are still devoted to developing tools for conservation quantification and working with point and non-point sources to identify the opportunities for sustainable and cost-effective improvements that will result in cleaner water. Building these tools is still greatly beneficial to us and our state, and is an integral part of a foundation that a market could potentially sit on in the future.

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Appendix A. Resources

There are many informational resources available on market efforts across the nation and globally. This list is not meant to be exhaustive or preferential, but should provide a thorough background.

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