



# Mid-Coast Water Planning Partnership

## Meeting Notes, May 30, 2018



**Date:** May 30, 2018, 4:00 – 8:00 pm

**Location:** Best Western Agate Beach, Newport, Oregon

**Participants:** 65 people, see pages 15-16 for attendance list

**Conveners:** Timothy Gross, Public Works Director and City Engineer, City of Newport  
Harmony Burrigh, Planning Coordinator, Oregon Water Resources Dept.  
Alan Fujishin, Owner, Gibson Farms  
Adam Denlinger, General Manager, Seal Rock Water District

**Project Team:** Jeanne Nyquist, Shirlene Warnock - Innovative Growth Solutions  
Ronan Igloria, Ingria Jones, Suzanne de Szoeka, Adam Sussman - GSI Water Solutions

### Next Steps

- Work Groups to schedule meetings in June.
- IGS to schedule joint meeting of representatives from Work Groups to coordinate cross-cutting issues.
- Panel of Peers scheduled for June 14, 6:00-8:30 pm, at Hatfield Marine Science Center, Visitor Center
- Next Partnership Meeting – August 28, 2018, 4 – 8 pm, Yachats Commons
- Next Coordinating Committee Meeting – conference call June 15, 9 – 11 am

## Meeting Objectives

- Share work of MCWPP Work Groups.
- Report on results of Work Group surveys and discuss priority issues/needs for further study.
- Status report on work of Communication and Outreach committee.
- Decision on recommended Charter language revision.

## Welcome and Introductions

The facilitator welcomed the Partnership members, participants introduces themselves, and reviewed the following key points:

- This is the 9<sup>th</sup> meeting of the Partnership. We have been meeting for the past 18 months and much has been accomplished.
- Relationships have been very important to the success of this pilot so far, and it is exciting to see so many new people joining the Partnership.
- Participants were reminded that this is not a regulatory body - it is about shared goals and gains.
- This is not your average planning process, it is locally lead.
- It is not about pointing fingers or placing blame, it is about working together for joint gain.
- The work we do together will help us be successful in seeking funding for local projects. Funders want to see a long term, integrated plan to support entire region.

## What are we doing here? Integrated Water Planning

### YES!!!

- ❑ Cooperative approach that balances voices and interests
- ❑ Local solutions identified through consensus
- ❑ Focused on the future of water, not the past
- ❑ Built on strong partnerships
- ❑ Voluntary, non-regulatory
- ❑ All about shared goals and shared gains
- ❑ Shaped by the will of this group

### Not so much...

- ❑ Not your average planning process
- ❑ Not a regulatory process and does not affect law or policy
- ❑ Cannot impact water rights
- ❑ Isn't about pointing fingers or placing blame
- ❑ Isn't a venue to pursue singular interests or agendas
- ❑ Doesn't prevent partners from pursuing actions on their own

## Bend Water Planning Conference

On May 9 and 10, 2018, a water planning conference was held in Bend, Oregon that brought the four Place Based Planning (PBP) pilots together to share information. Three of the MCWPP attendees shared the following observations:

- **Wayne Hoffman:**
  - All pilots are very different from each other in terms of issues, but are similar in process.
  - Harney County is in crisis because of over allocated resources.

- Grand Ronde is going through this planning process to avoid a crisis.
- Lower John Day is in between - parts of the community are running out of water, but this is not a systemic issue.
- All 4 groups are doing a good job of following mandates in organizational structure – this is working well in all groups.
- This gives me confidence this is a process that can work!
- **Audrey Sweet:**
  - All pilots are trying to solve problems and there is a lot to learn from one another.
  - Some groups are more concrete in solidifying numbers.
  - I walked away inspired.
- **Tim Gross:**
  - Max from the Ford Family Foundation (FFF) attended the conference.
  - The FFF is supporting a learning initiative for pilots to join with conveners from other areas to work together to seek funding. This is an opportunity to work together instead of competing with one another.
  - The pilot conveners are also teaming together to go to the legislature – even though some of the issues are different for the pilots, there is also much we have in common.

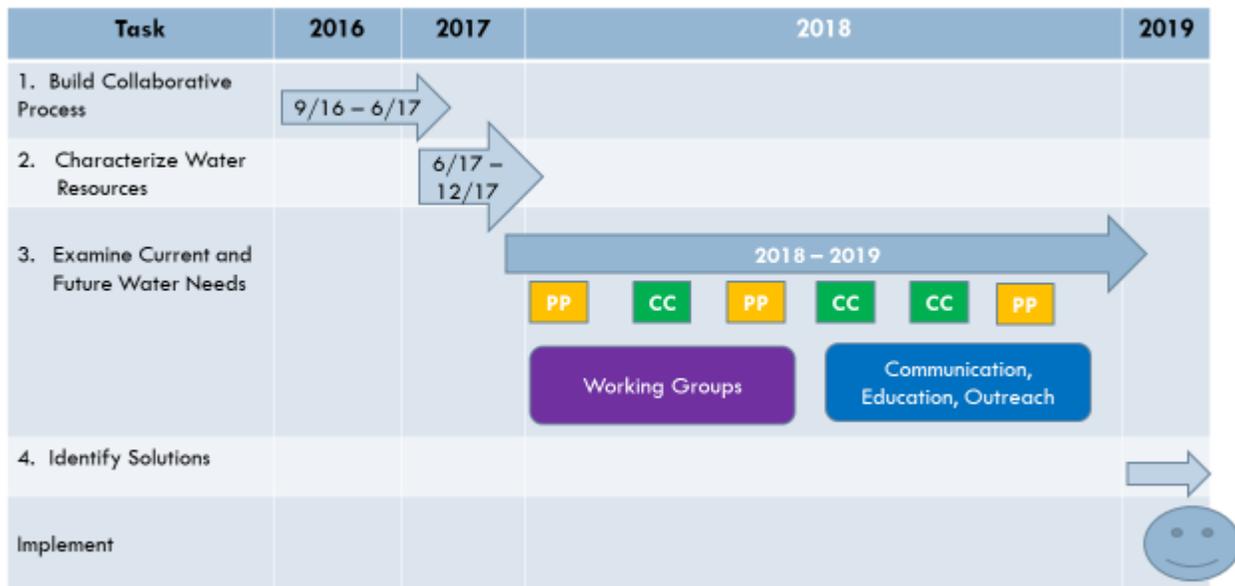
### Status of Partnership Work

The Facilitator recapped the planning process and schedule.

## Recap - Planning process and schedule



## Schedule



### Work Group Reports and Discussion

GSI gave an overview of the Step 3 needs assessment.

Step 3 Need Assessment Objectives:

- Identify and prioritize water-related *needs and vulnerabilities*
  - Out-of-stream and Instream
  - Direct and indirect
  - Near- and long-term
- Define and quantify needs to set up Step 4 implementation
  - Actionable strategies, policies, and projects

Three working groups were formed – In-Stream/Ecology, Self-Supplied, and Municipal/Water District. The work groups conducted surveys to identify priority issues to guide the needs assessment process. The three work groups then provided a brief presentation summarizing their work to date.

**In-Stream / Ecology – Joyce Sherman** outlined the priority issues identified by the group:

- Illegal water diversions
  - Less flow contributes to lower water quality
  - Gaining evidence may require trespassing on private lands
  - Many pumps are on private property
- Low habitat complexity – Less woody recruitment and fewer riparian plantings contribute to temperature increases, suspended sediments, higher peak flows, and chemical/nutrient input.
- Channel dredging – Altered channels result in substrate impacts.
- Compromised water quality results:
  - Temperature increases
  - Low dissolved oxygen levels
  - Increased pollutants and nutrient inputs
  - Poor quality habitat

- Lack of connectivity – reduced access to alcoves, off-channel areas, wetlands.
- Dikes and tidegates – barriers to fish passage result in reduced spawning/rearing areas.
- Additional issues:
  - Over-allocation of water
  - Siletz River is on Oregon’s 303d list
  - Biosolids dumped on land near rivers
  - Increased impervious areas
  - Landscape management activities
- Solutions:
  - In-stream structure (complexity)
  - Restore beavers
  - Grants for water testing
  - Organic – agricultural, households
  - Above all - Conservation

**Self-Supplied – Audrey Sweet** outlined the priority issues:

- Users: Domestic, Agricultural, Industrial
- Sources: Deep and shallow wells, springs, surface water
- Issues identified through survey responses:
  - Water Quantity:
    - Seasonal water availability due to climate change, population growth, less natural storage
    - Aging infrastructure – leaky systems, financial cost to upgrade
    - Regulations – water rights
  - Water Quality:
    - Nutrients – fertilizer and biosolids
    - Sediment
    - Herbicides and pollutants
    - Naturally occurring elements
    - Bacterial (E-coli); deteriorating wells and livestock
  - Financial costs – additional treatment
  - Regulations – well testing, lack of protection and enforcement
  - Lack of monitoring and data collection
- Data Gaps
  - Current consumption of surface water and groundwater
  - Distribution of water users across the Mid Coast
  - Projected water availability based on population growth and climate change models – will future availability meet needs of self-supplied water users?
  - How is water being used? Are there opportunities for efficiencies or conservation?

**Municipalities and Water Districts** – Stephanie Reid outlined the priority issues for this Work Group:

The Municipal and Special District Providers (MSDWG) are those defined by districts of agencies serving 100 connections or more. The MSDWG held our first meeting March 20<sup>th</sup>, we decided to meet the third Tuesday of each month at Seal Rock Water District Office. The first meeting we went over the objectives of the working and created the survey, beginning with the GSI model and we changed it quite a bit. At the second meeting we

strategized about how to reach the providers who had not yet responded, the due date was May 4<sup>th</sup>. We discussed if we make the survey easier to respond, the group spend a lot of effort trying to contact smaller providers. We did receive eight completed surveys and GSI assembled the results. The issues were fairly common or consistent with the responding providers. The major issues identified were in summary:

- Insufficient water supply, decreased flows in late summer and fish persistence conditions reduce access to water supply.
- Lack of multiple water supply sources, including interconnections
- Improvement/replacements of infrastructure are needed; most systems are over 100 years old and in various stages of replacement.
- Many water lines are at the end of their useful life, infrastructure is vulnerable to earth movement and tsunamis in some locations
- Storage capacity limitations
- Turbidity associated with heavy rains affect water quality and treatment operations
- Lack of regional collaboration
- Lack of available state and federal grants
- Inability of customers to cover anticipated costs

Solutions identified by respondents:

- Collaboration with neighboring water providers to improve water supply resiliency
- Infrastructure improvements
- Additional water sources
- Help with natural storage (beavers!!)
- Water conservation

## Prioritization of Needs

Based on the work of the Partnership to date, GSI proposed a process to prioritize the needs that were identified by the three work groups.

### Types of Needs:

#### ***Resource Needs***

1. Water User Demands
2. Surface Water (supply and instream)
3. Groundwater (supply and yield)
4. Habitat (non-flow)
5. Monitoring

#### ***Administrative/Legal Needs***

6. Regulations
7. Funding
8. Collaboration

## Priority Levels:

### **Baseline Assessment - GSI led**

- Basin-wide
- High-level
- Existing data
  - Water provider, county, state, federal, non-profit data
  - Example outcomes:
    - Understand municipal water supply vulnerabilities
    - Identify instream water rights and when they are not met

### **Work Group led**

- **Focus Areas** - Priority, overlapping needs in localized area; requires additional data and analysis
- **Pilot Projects** - Focus Areas with data limitations and unknowns to be addressed with additional study (longer-term)

### **Cataloged Issues**

- Lower priority or much longer-term issues; identified but not addressed directly by the Partnership's Place Based plan

### **Partnership Comments / Questions**

- We need to identify major water users – perhaps depict in a pie chart. (Paul Engelmeyer)
- We need to develop a conservation strategy. (Paul Engelmeyer and others)
- Ingria Jones, GSI, explained that the baseline issues study will consider conservation.
- Instream/Ecology work group – struggled to make sense of cause and effect and to understand underlying causes. (David Waltz)

## Prioritization Exercise and Discussion



Facilitators explained that the listing of 21 focus issues for study are posted on wall charts posted. Each participant was given 6 dots each to indicate their priority issues during a first round of prioritization, and then one additional bonus dot for the final round of prioritization.

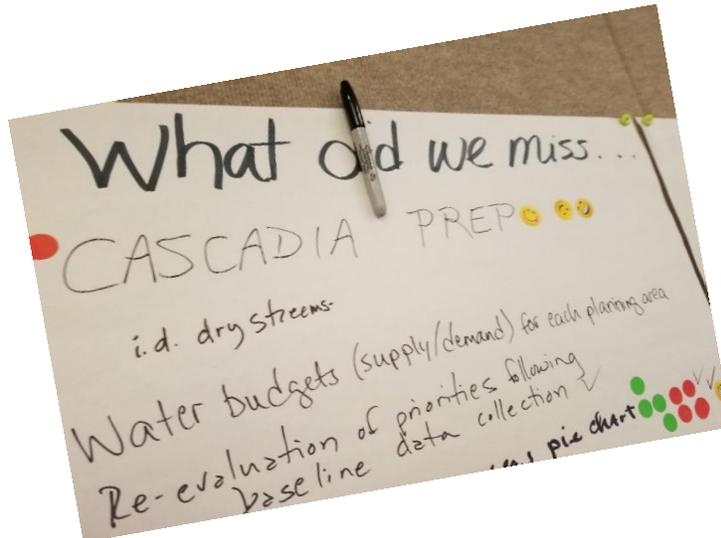
Also, participants were invited to list their thoughts in regard to the following 2 key questions (also posted on wall charts)

- What did we miss?
- Are there synergistic opportunities we haven't yet recognized?

**Results of the prioritization process and proposed next steps are included in an attachment to these notes.**

**Partner comments:**

- Don Andri – MMT (Meyer Memorial Trust), Eco Trust, and Sustainable Oregon are providing a grant to look at all 50 coastal water sheds. This is a 2 year funded grant. It may provide the MCWPP another chance to collaborate.
- Cyndi Karp
  - Q: When are we going to have a conservation working group?
  - GSI Answer: This will be addressed in Step 4 of the planning process.



**Climate Change Analysis – US Army Corps of Engineers (USACE)**

US Army Corps of Engineers (USACE), Spencer Narron and Keith Duffy provided a presentation outlining their scope of work to define climate change impacts on the Mid Coast.

Climate change will alter the future state of the Pacific Northwest including its coastal communities and natural habitats.

The Corps has developed procedures and guidance dealing with impacts to inland hydrology (ECB-2016-25), evaluation of sea level change (ETL-1100-2-) and guidance for detection of non-stationarities (ETL 1100-2-3), i.e. are there signs of climate change in the observed record.

Based on this, the Corps offered to provide general knowledge as well as data dealing with future temperatures, precipitation and runoff trends, in the 2070's timeframe.

Unfortunately, there is not high resolution, future climate dataset for the Oregon the coast.

This is primarily because there has not been resources to generate detailed data (e.g. sub-monthly rain and flow timeseries) input used by hydrologic and hydraulic computer models.

Therefore the Corps will focus on providing a qualitative analysis for the 2070's timeframe (i.e. 2055-2085) trends over the next year.

These will be used to make a qualitative vulnerability assessment of water supply, drought and flooding, and ecosystem/habitat related impacts.

Based on recent study drivers surveys, the Corps will focus on:

- Seasonal trends for groundwater, stream and other surface water declines in the 2070s.
- Qualitative impacts on water quantity in terms of temperatures, turbidity, etc.
- Trends to more extreme high flow (flooding) as well as potentially drier (droughts) seasonal events.

Questions and Answers regarding the USACE scope of work

- Q – What climate trends are you seeing for the Mid Coast, and how will we manage this change?
  - General trend in temp rate is projected to get warmer for most models. Winter peak time and volumes will get larger – but certainty becomes more extreme.
  - Manage this through conservation and being as efficient as possible.
- Q - Is Army Corps going to provide funding for more monitoring?
  - No, this is not in the scope of work.
- Q - Do you provide recommendations for communities for modeling?
  - We have just enough to get seasonal trends for this area – if you want better models, we will need new models and funding to run them.
- Co-Convener Tim Gross, reviewed why we asked the USACE to help with this pilot:
  - Provides validity to our process.
  - Helps us to do long term planning and understand how water is influenced by climate change. We are looking 20-30-50 years down the road.
  - It overlays everything we do – it reinforces the recommendations for the plan. The USACE work will provide validity and help us to make better informed decisions.



### **Working Group (WG) ‘Huddle’ to Plan Next Steps**

The three working groups met for 30 minutes to consider the results of the prioritization exercise and to plan next steps. The work groups then provided a brief verbal report.

#### **Self-Supplied WG report – Suzanne de Szoek**

- Not surprised about results of dot prioritization exercise.

- Noticed there was under – representation of some groups, such as small water districts.
- We will think about who was not here and how to get them involved.
- Joint meeting in June with other WGs – YES

#### **Municipalities and Water Districts – Scott Andry**

- Discussed small systems and how they are affected.
- Discussed storage.
- Talked about how conservation affects water infrastructure and other things, including funding resources.
- Interested in joint meeting in June with other WGs

#### **Ecology – Wayne Hoffman**

- Discussed how to move forward to get answers to the questions: how much water can be withdrawn from surface water resources w/o ecological damage?
- Discussed modeling needed to understand relationships between temp/ flow and watershed conditions – focused discussion on Siletz – already a lot of efforts going on in Siletz w/Tribes in partnership with DEQ, Bureau of Reclamation, Coho Business Process and others.
- By getting all those people talking together, there is a potential of getting synergy to answers that can be applied in other places.
- Need to focus on places like Siletz where there is already significant public use and it is targeted for future withdrawals.
- Streams that are remote will be lower priority.
- Natural storage is an option we will look at.
- We want to identify what we can do to ameliorate temps so more water is available for summer use.

#### **MCWPP Business Meeting – Charter Revision:**

Co-convener, Alan Fujishin, presented the following:

- In 2016 the Partnership created a Charter as our governing document.
- We did our best to anticipate how we are going to operate and establish rules for how we will work together.
- Charter modification process is described in Charter.
- Charter has no specific mechanism for changing personnel, conveners, organizations etc.
- Alan reviewed the proposed changes to the ‘Project Team’ section in the marked up Charter (see pg. 14)
- The Coordinating Committee has reviewed the language and recommends approval.
- Alan asked if there are any questions – none were asked.
- The changes were approved by consensus of the Partnership.



- Please reach out to one of the co-conveners or one of the facilitators to let them know.
- Tim explained that the other pilots are in the same place financially. The funding just has not been sufficient to sustain the work that needs to be done.
- We are taking control of our water destiny. The work we are doing will make sure these resources are here for our children and grandchildren.

Alan – emphasized the value of the process and how difficult it is to express a monetary value for this process. Please consider contributing cash or in-kind.

## Communication and Outreach Status Report – Harmony Burrigh

### Web-site review:

- Website: [www.midcoastwaterpartners.com](http://www.midcoastwaterpartners.com) Harmony reviewed the website contents and demonstrated:
  - Partner directory – value in collaborating with people.
  - Overview – why is water important?
  - Meeting materials – compilation of information and records of our discussions.
  - Messages (email blasts) are archived.
  - Working Groups – rosters, materials, announcements and notes.
  - If questions about website, contact Harmony Burrigh or Lee Ann Prchal.
  - Jeanne Anstine questioned if maps, such as the landslide zone map shared tonight, are on the website. Harmony replied that they are not currently, but we will consider adding them.
- Gaudi provided an update of the work she is doing to develop a ‘story map’ to tell the story about the Mid Coast Region’s water resources.
- Suzanne commented that City of Salem has a story map about water that is a good example.

### Panel of Peers:

Panels – The idea was generated by Maryann Bozza. On June 14, first Panel of Peers is scheduled. If you have knowledge of specific outlet to publicize the event, please send to Brianna Goodwin at Surfrider. This is our first larger public outreach event. We will have a series of panels over the next year.

### Stipend Announcement:

Caroline Bauman, announced, Thanks to MMT and OCF, we now have small grants as stipends to support Partners so they can participate. Two stipends have been recently awarded to the following:

- Lincoln Soil & Water Conservation District
- MidCoast Watersheds Council

These small grants (up to \$5K per calendar year) are available to any non-profit, academic institution, local government (cities, ports, special districts), trade associations, chambers of commerce.

### Social Time and a Special Guest:

Facilitators announced that IGS would once again host a social hour in the pub directly follow the meeting. To send us off, a special guest gave us a surprise performance! Thank you Patty Page (AKA: Caroline Bauman) for the special song about Yachats.



## Charter language modification approved by Partnership 5-30-18

### Structure Section:

**Project Team (PT):** The Project Team includes the Co-Conveners as well as technical consultants. The Project Team makes administrative and process decisions regarding implementation of the grant and the planning process. This includes planning meetings and preparing materials and meeting notes to support the work of the Partnership, the Coordinating Committee, and Sub-groups. The Project Team also recommends Partners to serve on the Coordinating Committee to represent a cross-section of the Partnership.

The Co-Conveners are responsible for bringing people together to address an issue, problem or opportunity while remaining impartial to any particular outcomes. The Co-Conveners' primary responsibility is to serve as the organizer and administrator of the collaborative process, carrying out the preliminary and follow-up tasks that ensure the process progresses in a manner consistent with this Charter. Toward that end, the Co-Conveners may engage and direct support staff and contractors on behalf of the Partnership.

As the needs of the Partnership evolve over time, Co-Convener organizations or personnel may change. In such cases, the Project Team will recommend changes to the Coordinating Committee for their consideration. The Coordinating Committee may consult the Partnership or appropriate Sub-Group before making a decision.

## May 30, 2018, Meeting Attendance

1. 65 participants total attended the meeting – (*green shading shows they have signed the charter*)
2. 17 first time attendees
3. 8 people signed the charter at the 5/30/18 meeting

First Name	Last Name	Organization
Adam	Denlinger	Seal Rock Water District
Adam	Sussman	GSI Water Solutions
Alan	Fujishin	Gibson Farms
Audrey	Sweet	Lincoln Soil and Water Conservation District
Bradley	Wynn	Seal Rock Water District
Brady	Weidner	City of Depoe Bay
Caroline	Bauman	Lincoln County Economic Development Alliance
Cinamon	Moffett	Hatfield Marine Science Center
Cyndi	Karp	MCWC and Interested Member of the Public
David	Gomberg	State Rep David Gomberg, Dist 10
David	Waltz	DEQ
Don	Andri	Oregon Coast Comm Forest Assoc
Gouri	Mahadwar	
Harmony	Burright	Oregon Water Resources Department
Ingria	Jones	GSI Water Solutions
Jackie	Mikalonis	Office of Governor Kate Brown, Regional Solutions
Jacque	Fern	Oregon Department of Environmental Quality
James	Took	City of Yachats
Jeanne	Anstine	Newport Community Garden
Jeanne	Nyquist	Innovative Growth Solutions
Jennifer	Beathe	Starker Forests, Inc.
Jerry	Anderson	Hancock Forest Management
John	Spangler	Oregon Department Fish and Wildlife
Joyce	Sherman	Northwest Steelheaders/Stewards of Rocky Creek
Kathy	Minta	Kozy Acres Water System
Lee Ann	Prchal	City of Newport
Leon	Nelson	Beverly Beach Water District
Mark	Saelens	Lincoln County
MaryAnne	Reiter	Weyerhaeuser
Matt	Thomas	OR Dept of Forestry
Mike	Bauman	Kernville-Gleneden-Lincoln Beach Water District
Nikki	Hendricks	Oregon Water Resources Department
Pam	Lind	Confederate Tribes of Siletz Indians
Patrick	Wingard	Oregon Department of Land Conservation and Development
Patti	Ferry	Newport Chamber of Commerce
Paul	Englemeyer	The Wetlands Conservancy
Paul	Katen	DEQ- Drinking Water
Preson	Phillips	Oregon State Parks

Ronan	Igloria	GSI Water Solutions
Sandra	Bohn	Oregon State University
Scott	Andry	City of Waldport
Shirlene	Warnock	Innovative Growth Solutions
Stephanie	Reid	City of Lincoln City
Steve	Bemis	Interested Member of the Public
Suzanne	DeSzoeker	GSI Water Solutions
Tim	Gross	City of Newport
Tim	Miller	Landowner, Oregon Cattlemen's Association - Lincoln County & Oregon Farm Bureau - Lincoln County
Wayne	Hoffman	Mid-Coast Watersheds Council

**17 Attended the meeting for the first time (3 signed the charter on 5/30/18)**

First Name	Last Name	Representing
Andrew	Grant	City of Newport
Bill	Kucha	350 Oregon Coast Central
Bill	Monteg	Public
David	Powell	Ocean Shores/Coast Watch
David	Bayus	General
Debra	Fant	Lincoln County Comm. Rights
Glen	Kirkpatrick	Stewards of Rocky Creek
Hannah	Hegerberg	OFIC
Jay	MacPherson	OHA
Kathie	Dello	OSU/CIRC
Kathy	Short	Depoe Bay City Council
Keith	Duffy	USACE
Onno	Husing	Lincoln County Planning & Development
Pat	Bayus	General
Renee	Coxen	ODFW
Sally	Rose	
Spencer	Narron	USACE

**The following 8 people signed the charter at 5/30/18 meeting (73 total have signed to date)**

First Name	Last Name	Representing
Andrew	Grant	City of Newport
Bill (William)	Monteg	Public
David	Gomberg	State Rep
Jacque	Fern	Oregon Department of Environmental Quality
James	Tooke	City of Yachats
Jay	McPherson	OHA
Matt	Thomas	ODF
Paul	Katen	DEQ- Drinking Water

**Attachment: Prioritization of Focus Issues and Next Steps (prepared by GSI)**

## Prioritization of Focus Issues and Next Steps

### Mid-Coast Place-Based Water Resources Plan

#### Attachment to May 30, 2018 Partnership Meeting Notes

### Recommended Focus Issues

At the May 30<sup>th</sup> Partnership Meeting, GSI presented an approach to prioritize issues for Step 3 Needs Assessment of the Planning Process (Identify current and future water needs). This approach consists of GSI leading the effort to develop information on “baseline issues” (i.e. issues that are basin-wide, high-level, and have existing data and/or readily accessible data), and Work Groups leading the effort to develop information on “focus issues” (i.e. issues that require additional data analysis and may be more localized). GSI presented Partners with a list of potential focus issues, based on issues identified by Partners in previous Partnership meetings, information collected during Step 2 of the Planning Process (Characterize Water Resources), and Work Group survey responses. Partners then identified focus issues they felt were most important, and also wrote down issues that were not fully captured or stated explicitly.

GSI recommends that each Work Group take the lead on specific focus issues. To come up with the recommended focus issue “assignments” for each Work Group, GSI considered: 1) the results of the priority issues selections (i.e. amount of support an issue received); 2) the diversity of interests that selected a given issue; 3) the level of reoccurring concern; 4) the voices of those not present at the Partnership meeting; and 5) Work Group member interests, experience, and technical expertise. Assigning priority issues to specific Work Groups is intended to allow Work Groups to share their expertise and to encourage all Work Groups to contribute to further study of these focus issues.

### Recommended Work Group “Assignments”

The recommended focus issues for Work Group efforts are described in **Table 1**, and listed as follows:

- **Municipal and Special District Work Group (MDW):** Water Infrastructure (including Resiliency/Cascadia); Infrastructure grants; O&M needs of small providers
- **Instream and Ecology Work Group (IEW):** Land management effects on flows; Conceptual model (instream & ecological processes). GSI recommends that the Instream and Ecology Work Group (IEW) focus on developing a conceptual model describing ecological processes and the relationships between issues related to instream flows and habitat complexity<sup>1</sup>.
- **Self-supplied User Work Group (SSW):** Bacteria in source water; Emerging chemicals; Insufficient groundwater supply
- **All Work Group Water Conservation Sub-Committee:** Water conservation programs. Based on the shared concern for water conservation across many interest groups in the Partnership, and the cross-cutting nature of water conservation needs, GSI recommends that a “Water

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<sup>1</sup> The objective is to develop common problem definitions, i.e. views of issues, pressures, drivers, causes and effects (responses). This idea of a conceptual model is based on feedback from the IEW.

Conservation Sub-Group be developed to address water conservation programs. This Sub-Group would be comprised of individuals from any Work Group.

- **U.S. Army Corps of Engineers (USACE):** Climate change impacts on streamflow. Based on the available contracted support from USACE and the cross-cutting nature of climate change impacts on streamflows, GSI recommends that USACE lead the technical aspects of this focus issue with input from interested individuals from any Work Group. GSI would continue to be the liaison with USACE.

Full results of the focus issue selections from the Partnership meeting is presented in **Table 2**.

## Next Steps

GSI has developed an approach to help each Work Group move forward with addressing these priority focus issue.

### Second or Third Week of June - Next Work Group Meeting

In order to launch our Step 3 current and future needs assessment, ensure progress, and encourage communication among the Work Groups, GSI proposes that Work Groups meet during the second or third week of June as a full group to discuss the recommendations above. A smaller group from each Work Group would then convene in the last week of June to help finalize the recommendations. During this time, GSI will begin work on the Baseline Assessment of Current and Future Needs. Important outcomes of this Work Group meeting are described below.

Proposed Work Group Meeting Actions:

- **Review and discuss Recommended Focus Issues** for Work Group Efforts.
- **Prepare comments for other Work Groups** regarding their Issue Outcomes and Study Descriptions. This may include identifying cross-cutting issues to be considered, recommending an approach for other Work Groups to consider, or brainstorming resources other Work Groups may want to consider<sup>2</sup>.
- **Form a Technical Sub-Group** that will lead Work Group focus issue study efforts (strongly recommend limiting this group size to 2-3 people).
- Identify Work Group members interested in working on a **Water Conservation Sub-Group**- that spans all Work Groups, and those interested in supporting the USACE's climate change assessment work.
- **Schedule** next Work Group Meeting and identify actions.

### Last Week of June – Joint Meeting with Work Group Representatives

During the last week of June, GSI proposes that **up to four members of each Work Group attend a joint Work Group Meeting** to share recommendations and next steps for studying the focus issues.

Representatives of each Work Group attending the joint Work Group meeting would include the Work Group's Spokesperson, Coordinating Committee Representative, and one or two members of the Work Group's identified Technical Sub-Group. Important outcomes of this meeting are outlined below.

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<sup>2</sup> The following Work Group Meetings (anticipated during July) can dive deeper into identifying data sources, data collection approach, and responsibility for data collection for each issue.

Proposed Joint Work Group Meeting Actions:

- **Review and finalize recommended focus issues** for Work Group Efforts.
- **Discuss feedback** on each Work Group’s Issue Outcomes and Study Descriptions, and **reach agreement** on Study Descriptions.
- **Establish communication plan** for Work Groups to share progress, information, and ideas.
- Identify members of **Water Conservation Sub-Group** and **USACE climate change** interested members.
- **Identify cross-cutting issues** for Technical Sub-Groups to consider.

July

During the month of July, GSI will work with Work Groups to finalize “data objectives” for each Work Group’s priority issues<sup>3</sup>. The data objectives would include identifying data sources, data collection approach, and assigning responsibility for data collection by topic. During this time, the Work Groups will work on compiling more detailed information about their focus issue(s), and can also identify resources that may be relevant to focus issues led by other Work Groups or resources that identify cross-connections between priority issues. Those supporting the climate change impacts focus issue will have an opportunity to engage with USACE as they prepare their final work plan.

Technical Sub-Groups for each Work Group can begin data gathering and preparation for a presentation of preliminary findings to the Partnership in August. Data gathering and work production will occur while data objectives are being finalized.

August

The next Partnership Meeting will be at the end of August in the City of Yachats. GSI will present preliminary results of Baseline Assessment that have begun to-date. Work Group representatives will present preliminary results of their focus issues data review and initial assessment work to the Partnership.

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<sup>3</sup> As outlined in the proposed Work Group Approach for each of the Work Groups and discussed at Work Group meetings during April, 2018.

Table 1. Recommended Focus Issues for Work Group Efforts

Priority Issue	Recommended Approach	Issue Outcome	Description	Geographic Scope
<b>Joint Work Group Lead</b>				
<b>Water conservation programs</b>	Formation of <b>“Conservation Sub-Group”</b> with diverse interests to address multi-faceted issues related to conservation needs	Understand the status of the <b>water conservation programs</b> being implemented by large systems and possible opportunities and constraints for expanding the programs.	Review documented water conservation efforts of target providers as described in their Water Management and Conservation Plans and/or conduct utility interviews. Information from baseline assessment (including a breakdown of water consumption by customer/user type) will be used as input to this process. Gather information about water conservation and reuse efforts from large industrial users. Review will include information about funding spent on water conservation efforts. Identify financial and political constraints and opportunities for enhancing incentives for water conservation efforts.	Specific Areas
<b>Climate change impacts on streamflows</b>	USACE to lead technical effort with GSI as liaison and input/coordination with self-selected Work Group members	Semi-quantitative <b>assessment of climate change impacts on streamflow</b> for specific drainage areas in the basin.	Based on information from baseline assessment, identify specific drainage areas or watersheds; review literature to document potential impacts of climate change on streamflow magnitude, duration, and occurrence frequency for select streams and/or stream segments; USACE will lead the technical assessment and will develop a workplan with potential for additional assistance from Oregon Climate Change Research Institute (OCCRI).	Specific areas

Table 1. Recommended Focus Issues for Work Group Efforts

Priority Issue	Recommended Approach	Issue Outcome	Description	Geographic Scope
<b>Instream and Ecology Work Group Lead</b>				
Land and water management effects on streamflow and aquatic habitat	Efforts led by <b>Instream and Ecology Work Group</b>	Develop a <b>“conceptual model”</b> that identifies issues and shared problem definitions related to effects of land management and withdrawals on streamflow and habitat. The conceptual model can be used to define other focus issues for consideration.	Describe ecological and hydrological processes as they relate to underlying mechanisms. Identify cause and effect linkages. Develop diagrams and narratives that identify relationships between land use, stream channel simplification, altered flow regime, and withdrawals and temperature, streamflow, natural storage, spring flow, marine nutrient transport, water quality, and aquatic species needs. Develop diagrams and narratives that identify relationships between channel configurations, substrate, and habitat complexity in estuary habitats.	Entire Planning Area
<b>Municipal and Special Districts Work Group</b>				
Water infrastructure improvements	Efforts led by <b>Municipal and Special District Work Group</b>	Identify <b>water infrastructure improvements</b> needed by large systems due to poor condition or capacity limitations to support understanding of overall infrastructure costs in the Mid-Coast.	Gather information from Water Master Plans about water infrastructure needs including: water treatment plants, wastewater treatment plants, pump stations, reservoirs, distribution lines, and diversion structures. Where available, document infrastructure age and lifespan (including septic systems). Review infrastructure seismic resiliency needs in relation to other condition or capacity issues. Contact Cities and Special Districts for this infrastructure information, as needed.	Specific Areas
Water infrastructure grant programs	Efforts led by <b>Municipal and Special District Work Group</b>	Understand existing <b>water infrastructure grant programs</b> (state and federal) to leverage these funding sources for water projects in the Mid-Coast.	Describe existing water infrastructure grant program structures and requirements. Interview water providers and grant administrators to identify specific challenges obtaining grants for water infrastructure. Research changes in state and federal assistance for municipal water supply over the past 20 years.	Entire Planning Area

Table 1. Recommended Focus Issues for Work Group Efforts

Priority Issue	Recommended Approach	Issue Outcome	Description	Geographic Scope
O&M needs of small water providers	Efforts led by <b>Municipal and Special District Work Group</b>	Understand <b>infrastructure and operational needs of small systems</b> to enable them to meet future demands.	Gather information from Oregon Health Authority, Oregon Department of Environmental Quality, and other available information about infrastructure, staffing, regulatory compliance, and vulnerability. Design targeted survey/interview guide to gather information from small water providers.	Specific Areas
<b>Self-supplied User Work Group Lead</b>				
Insufficient groundwater supply	Efforts led by <b>Self-Supplied and Industrial Work Group</b>	Understand locations <b>where groundwater supplies are insufficient</b> to meet demands of small systems and domestic users.	Gather information from small water providers, domestic users, and the watermaster about documented groundwater declines or occurrences of wells running dry. Research areas and types of future users of groundwater. Identify the timing and location of water truck sales.	Entire Planning Area
Bacteria in surface water and groundwater	Efforts led by <b>Self-Supplied and Industrial Work Group</b>	Identify areas where <b>bacteria impacts surface water and groundwater</b> supply and characterize the potential source(s) of bacteria.	Identify local partner testing or monitoring. Identify source surface waters and groundwater with past episodes of elevated bacteria by reviewing available monitoring reports, TMDLs, Consumer Confidence Reports, reported CSO events/permit violations, and beach closures. Map existing bacteria in groundwater and surface water testing/monitoring results. Identify and map potential source areas, including areas where biosolids are applied. Identify streamside areas without riparian buffers.	Specific Areas
Emerging chemicals and water	Efforts led by <b>Self-Supplied and Industrial Work Group</b>	Understand the presence and extent of <b>emerging chemicals</b> in the basin and <b>effects on source waters</b> and fisheries.	Identify local partner testing or monitoring. Review any documented concerns or local studies related to herbicides and fertilizers (e.g. search and synthesize abstracts of ODFW, DEQ, EPA, and OSU studies).	Entire Planning Area

Table 2. Results of Prioritization Exercise of Focus Issues from May 30<sup>th</sup> Partnership Meeting

Issue	Issue #	MSD WG	IE WG	SSI WG	CO WG & First-Timers	All Voters	Total	Notes
Water conservation programs	1	4	7	4	15	5	35	Identified as a cross-cutting issue with widespread concern. Recommended <b>priority issue for a new "conservation sub-group"</b> with representatives from each work group.
Water infrastructure improvements	2	11	7	3	20	13	54	Widespread concern. Recommended <b>MSD WG-led priority issue</b> based on strong group interest experience and expertise.
Insufficient groundwater supply	3	0	1	2	5	0	8	Recommended <b>SSI WG-led priority issue</b> based on group experience, expertise, and direct impact to group members.
O&M needs of small water providers	4	5	1	1	4	1	12	Widespread concern but limited votes (capacity issues for small provider involvement in partnership). Recommended <b>MSD WG-led priority issue</b> based on concern for vulnerability and involvement of these groups.
Water infrastructure grant programs	5	11	0	1	5	4	21	Widespread concern among MSD WG. Recommended <b>MSD WG-led priority issue</b> based group interest, experience and expertise.
Insufficient flows for aquatic species	6	2	0	1	7	0	10	Recommended for incorporation into <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.
Climate change impacts on peak flows	7	1	6	3	10	3	23	Recommended each WG identify specific questions. Work beyond current USACE study scope will be evaluated as potential priority issue(s) for USACE, WG members, or other partners <del>to assist with.</del>
Altered estuary habitats	8	1	1	1	8	0	11	Recommended for incorporation into <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.

Table 2. Results of Prioritization Exercise of Focus Issues from May 30<sup>th</sup> Partnership Meeting

Issue	Issue #	MSD WG	IE WG	SSI WG	CO WG & First-Timers	All Voters	Total	Notes
Water quality of beaches	9	0	0	0	2	0	2	Documented as an important issue. May be incorporated into work group study plans in the future, as needs are continually assessed and new information and understandings arise.
Elevated stream temperatures	10	1	3	1	10	3	18	Recommended for incorporation into <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.
Turbidity in Siletz River-Bay/Ocean Tribs	11	4	2	0	4	0	10	Documented as an important issue. May be incorporated into work group study plans in the future, as needs are continually assessed and new information and understandings arise.
Bacteria in surface water	12	1	0	3	6	0	10	Re-curring concern for partnership members. Recommended for incorporation with bacteria in groundwater supply as <b>SSI WG-led priority issue</b> based on expertise and direct impact to group members.
Land management effects on streamflow	13	2	12	3	14	6	37	Widespread concern for IEWG, C&O, and First-Timers. Recommended for incorporation into <b>conceptual model</b> of Mid-Coast ecological and hydrological processes. Recommended as <b>future pilot project</b> for further investigation.
Reduced natural storage	14	0	2	1	10	0	13	Recommended for incorporation into <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.
Decreased spring flow impacts	15	0	2	1	4	0	7	Recommended for incorporation into <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.

Table 2. Results of Prioritization Exercise of Focus Issues from May 30<sup>th</sup> Partnership Meeting

Issue	Issue #	MSD WG	IE WG	SSI WG	CO WG & First-Timers	All Voters	Total	Notes
Bacteria in groundwater supply	16	1	0	1	3	0	5	Re-curring concern for partnership members. Recommended for incorporation with bacteria in surface water supply as <b>SSI WG-led priority issue</b> based on expertise and direct impact to group members.
Climate change impacts on turbidity	17	0	0	0	2	0	2	Documented as an important issue. May be incorporated into work group study plans in the future, as needs are continually assessed and new information and understandings arise.
Altered flow regime effects on habitat	18	0	2	0	7	0	9	Recommended for incorporation into <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.
Emerging chemicals and water	19	2	1	3	9	1	16	Recommended <b>SSI WG-led priority issue</b> based on group experience, expertise, and direct impact to group members.
Algal bloom effects on water supply	20	0	0	1	4	1	6	Documented as an important issue. May be incorporated into work group study plans in the future, as needs are continually assessed and new information and understandings arise.
Adequacy of customer rates	21	2	2	0	5	0	9	Documented as an important issue. May be incorporated into work group study plans in the future, as needs are continually assessed and new information and understandings arise.

Table 2. Results of Prioritization Exercise of Focus Issues from May 30<sup>th</sup> Partnership Meeting

What did we miss? (Graffiti Chart)	Check Mark	MSD WG	IE WG	SSI WG	CO WG & First-Timers	All Voters	Total	Notes
Cascadia Prep					1	4		Documented as an important issue. Recommended <b>MSD WG-led priority issue</b> "water infrastructure improvements" will address earthquake resiliency.
i.d. dry streams								Documented as an important issue. <b>Baseline assessment</b> will identify streams with no instream water rights. May be incorporated into work group study plans in the future.
Water budgets (supply/demand) for each area						1		<b>Baseline assessment</b> will estimate current and future municipal water demands, including seasonal fluctuations. Baseline assessment will identify stream segments with existing and proposed instream water rights, identify when these water rights are not being met, and analyze how these locations relate to existing or proposed diversions.
Reevaluation of priorities following baseline data collection	1							Baseline assessment and WG studies will occur simultaneously. The focus of WG efforts may shift as new information and understandings arise. Baseline assessments will be fed to WGs as they are completed. Scheduled WG check-ins will ensure information sharing across WGs.
Create water users pie chart	2		6		6	4		Water consumption by customer/user type (i.e. water users pie chart) will be created as part of <b>baseline assessment</b> .
Storage					6	2		Existing storage capacity will be identified in <b>baseline assessment</b> . Documented as potential solution.
Create water users audit and BMP	1		4		1			Documented as potential solution.

Table 2. Results of Prioritization Exercise of Focus Issues from May 30<sup>th</sup> Partnership Meeting

What did we miss? (Graffiti Chart)	Check Mark	MSD WG	IE WG	SSI WG	CO WG & First-Timers	All Voters	Total	Notes
Are there adequate incentives for conservation	2		4		4			Potential focus of <b>conservation sub-group</b> .
Timber management that diminishes stream flows (FPA)	1		2		1	1		Potential element of <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.
Toledo industry that uses enormous amounts of clean water	5		1		1	2		Element of water-users pie chart (see above) and potential focus of <b>conservation sub-group</b> .
Fish and wildlife need water	5							Widely documented as a concern. Potential element of conceptual model of Mid-Coast ecological and hydrological processes. <b>Baseline assessment</b> identifies existing and proposed instream water rights and whether they are met.
Fish processing and water conservation								Element of water-users pie chart (see above) and potential focus of <b>conservation sub-group</b> .
Ground cover on steep graded hillsides helps to hold moisture, soil instead of eroding into streams								Potential element of <b>conceptual model</b> of Mid-Coast ecological and hydrological processes.
Correct/fix fish passage to Rock Cr to mitigate Big Creek Dam with \$ help from ODOT	2							Documented as concern and potential solution.

Table 2. Results of Prioritization Exercise of Focus Issues from May 30<sup>th</sup> Partnership Meeting

What did we miss? (Graffiti Chart)	Check Mark	MSD WG	IE WG	SSI WG	CO WG & First- Timers	All Voters	Total	Notes
Ecotrust MMT granted data	1							Documented as concern and potential solution.
Assess any possible collaboration								WGs and Partners can all help to identify opportunities.
3-4% wave energy devoted to desalination water production								Documented as potential solution.