

**Big Sky Sustainable Water Solutions Forum
Stakeholder Meeting**

Agenda

2/21/17

1:00-4:00 pm

**Big Sky Water & Sewer District Conference Room
561 Little Coyote Road**

1:00 Welcome

1:05: Overview and Objectives

- Goals – What do we want for water resources outcomes?
- Indicators of Success – What measures will help us know we're successful?

1:10-1:15: Public Comment

1:15-2:45: Small Groups: Formulation of Community Goals

- Small Groups
 - Ecological Health
 - Water Supply and Availability
 - Wastewater Treatment and Disposal

Each small group will formulate goals that reflect **what** they think are the outcomes they want. Groups are encouraged to come up with 1-3 goals in their assigned area. Groups will also identify indicators that will measure progress toward success of their goals. Groups will be asked to bring goals that they have reached consensus on.

2:45-3:50: Large Group: Community Goals and Initial Measures of Success

- Proposals for goal statements and indicators in each of the three areas are shared.
 - Collaborative discussion – if collaboration achieved, we finalize these goals statements.
 - Measures of success identified.

3:45-3:50: Public Comment

3:50-4:00: Closing

Big Sky Sustainable Water Solutions Forum
Small Group Assignments
2/21/17 Meeting

Group 1: Environmental Health	Group 2: Water Supply and Availability	Group 3: Wastewater Treatment and Disposal
Brad Bauer Randy Carpenter Kevin Germain Torie Haraldson Ethan Kunard Dave Moser Ann Schwend Ennion Williams Wendi Urie Jessie Wiese Bob Zimmer	Eric Becker Scott Bosse Pat Byorth Susan Duncan Ron Edwards Travis Horton Peter Manka Mike Richter Suzan Scott Kerri Strasheim Darcie Warden Brian Wheeler Steve White	Guy Alsentzer Mike DuCuennois Kristin Gardner Jim Hart Taylor Middleton David O'Connor Tim Skop Tammy Swinney Bill Simkins Eric Urban Ciara Wolfe Gallatin City-County Rep (Lori, Tom or Matt – if more attend, spread out to other groups)

*May need to shift individuals if we have holes in attendance.

BSSWS Forum: Examples of Goal Statements and Indicators of Success

Goal Statements: *What* the stakeholder collectively want to see for outcomes in water resources. These tend to be statements that are fulfilled over a long period of time.

Indicators of Success: *Metrics* that track important factors related to goals and are feasible to collect.

Objectives and strategies: *How* the goals are to be met. (Specific tools and approaches with information about who, what, when and where in the work plan underneath them.).

Examples:

Goal Statements:

Vail, Restore the Gore Project

<http://www.vailgov.com/projects/restore-the-gore>

The goal of implementing all recommended actions is the complete restoration of the quality of the water in Gore Creek to ensure it is removed and is never again listed on the Colorado Department of Public Health and Environment's list of impaired streams.

[Vail has extensive “how” strategies in their plan. Those selected are designed to help Vail reach this goal.]

Big Hole Watershed Committee

<https://bhwc.org/>

1. Land Use Planning: Climate resiliency, specifically riparian protection standards and incentives for landowners to preserve riparian systems.
2. Wildlife: Reduce predator-human conflict with non-lethal deterrence.
3. Water Quality & Quantity: Gain climate resiliency, specifically in water scarcity and high water temperature. Actions are through management plans, monitoring, research, and restoration activities. This includes the use of wetlands as a tool to improve or maintain water quality.
4. Invasive Species: Reduce and prevent invasive species infestation, particularly noxious weeds.

Fort Collins Community Dashboard

<https://fortcollins.clearpointstrategy.com/>

Area:

Environmental Health

Fort Collins promotes, protects and enhances a healthy and sustainable environment.

Indicators of Success:

Example

City of Fort Collins, Performance Indicators for environmental health goal.



Environmental Health Performance Metrics

[<< Return to Performance Measurement](#)

Select Language ▾

Subscribe to Quarterly Email Updates

enter email address

Go

Measure/Explanation	Actual	Target	Results
<p>Community Energy Use</p> <p>Percent change in electricity use (kilowatt hours or kWh) per capita compared to 2005 (baseline year) The metric is evaluated quarterly, and is one measure of the community's energy efficiency.</p>	--13.00%	--10.00%	Q3 2016
<p>Outdoor Air Quality Index (AQI) - Fine Particulate Matter 2.5 microns (PM 2.5)</p> <p>The metric is a measure of the number of 'good' air quality days (as defined by EPA's Air Quality Index - AQI) in a quarter based on fine particulate matter air monitoring data from Fort Collins. The AQI is calculated by EPA as a measure of local air quality and its effect on human health. The higher the AQI value, the greater the level of air pollution and the greater the health concern. 'Good' air quality corresponds to an AQI of 50 or less (on a scale of 0-500) and poses little or no risk of adverse health effects. A fine particulate matter target of 95% 'Good' days in a quarter was selected to evaluate local air quality conditions.</p>	100.00%	95.00%	Q3 2016
<p>Outdoor Air Quality Index (AQI) - Ozone</p> <p>The metric is a measure of the number of 'good' air quality days (as defined by EPA's Air Quality Index - AQI) in a quarter based on ozone air monitoring data from Fort Collins. The AQI is calculated by EPA as a measure of local air quality and its effect on human health. The higher the AQI value, the greater the level of air pollution and the greater the health concern. 'Good' air quality corresponds to an AQI of 50 or less (on a scale of 0-500) and poses little or no risk of adverse health effects. An ozone target of 75% 'Good' days in a quarter was selected to evaluate local air quality conditions.</p>	51.00%	75.00%	Q3 2016
<p>Wastewater Treatment Effectiveness Rate (%)</p> <p>The utility's compliance with the effluent quality standards in effect for the Water Reclamation and Biosolids Facilities. The indicator is expressed as the percent of time each year that an individual wastewater treatment facility is in full compliance with applicable effluent quality requirements.</p>	100%	100%	Q3 2016

Potential Initial Measures

These measures are potential measures that could be used to track progress toward goals.

Ecological Health

- Acres of wetland (would require knowing where wetlands are)
- Assessed wetlands that are functional
- Acres of wetland habitat restored or enhanced
- Length of stream assessed with healthy riparian buffer

- Length of stream assessed with healthy riparian buffer/compared to total length
- Miles of impaired streams compared to total stream length
- Miles of assessed streams compared to total stream length
- Habitat measure that includes some set of sub-parameters including:
- Instream habitat parameters: pools/mile compared to reference conditions
 - Woody/debris/miles
 - Residual pool depths
 - Width/depth ratios
 - Pebble counts
- Nutrients
- E. coli
- Observed/expected aquatic invertebrates
- Trout/mile
- Native trout/mile or population density
- # Culverts/pinch points
- Temperature (max temp at 65-70 degrees Fahrenheit)

Supply

- Average gallons/person/day
- Use/SFE/day
- Household acre ft./yr.
- Well levels (some sort of average or targeted to peak irrigation use or related to lowest point)
- Surface flows – timing, meeting in-stream flow minimums
- Acres lawn
- Conversion from lawn: xeriscape or natural area (acres or by development area)

Disposal:

- Gallons effluent/day
- Average daily flow/person or household (would need to think about occupancy rates)
- Treated wastewater applied Gallons/applied/year
- Septic systems hooked up to main system
- Septic maintenance completed
- Replace aged septic systems
- Ratio of infiltration area (stormwater methods) to impermeable surface area
- Ratio of open space/impervious areas/development

Collaborative Decisions

Stakeholders will be working together to make collaborative decisions.

Decisions for the February 21, 2017 Meeting:

Small Groups:

- Create **goal statement(s)** that describe what the desired water resources outcomes are for the topic your small group was assigned.
 - Groups are looking to make 3 or fewer goal statements for each area.
- Describe indicators of success that could be tracked so stakeholders and the community would know if progress was being made toward the goal.
- Agree collaboratively on what the small group brings to the large group.

Large Group:

- Discuss and affirm, modify, combine, extend or reject the goal statements brought from the small groups.
- Discuss and affirm, modify or change indicators of success.
- Agree collaboratively on goals statements and indicators of success.
- If there are areas where more work is needed, specific action steps will be identified.

Collaborative Voting:

A group discusses options until there is a feeling that a proposal might be offered. In this meeting, the goal is to agree on goal statements and indicators for success.

How to do collaborative voting:

- 1) Make a proposal. In this case, it would be a goal statement first. Those present can ask clarifying questions.
- 2) All stakeholders vote. Thumbs up means you like it; thumbs sideways mean you can live with it and thumbs down means you disagree in its current form.
- 3) If all thumbs are up or sideways, this is a fully collaborative vote.
- 4) If there any thumbs down, those stakeholders say what isn't acceptable, what is acceptable and offers suggestions for an acceptable improvement. Discussion on any changes among the group is encouraged.

Once the group thinks it has a new option, a new proposal is made and this cycle continues. This continues until collaboration is reached OR the group concludes that full collaboration can't be reached. The group can then agree to leave this decision as undecided or can vote at the 75% level and note that full collaboration was not achieved. This second option is a last option and should not be used unless all other options have been decided.

Themes from 1/12/17

The group pulled out six themes. Five represent values that the group has identified as important for the community as it develops goal statements and approaches.

Values:

- Healthy fish and wildlife
- Economic success and healthy environment tied together
- Quality of Life – social and environmental factors
- Sense of community and ability to direct its own future
- Integrated approach

These values may help guide the group to find goals and specific strategies for addressing those goals for water resources.

A criterion that affects feasibility:

- Policy constraints or opportunities

Sorting “What” and “How” from the 1/12/17 Meeting

In discussion, the worst and best case scenarios, group members identified several factors that were about “what” and several that were “how” factors. Once this group agrees on “what,” we’ll move toward “how.”

What was identified are ideas. Stakeholders will determine goal statements and indicators through the collaborative process. This list is not comprehensive. The summaries and review of information from the previous meetings has further information that can help identify goal statements.

Identified issues that are potentially related to “what:”

Ideas that are Water Resources Outcomes:

- Big and happy fish and the biggest, happiest hogs
- Healthy wildlife populations
- Fisheries, aquatic resources maintained for future generations
- Healthy people
- Ecological condition maintained or improved
- World class fishery exists within a world class community
- TMDLs lifted and water quality improvements
- Comprehensible and sustainable wastewater treatment in place
- Big Sky leads Montana in water quality and sustainability
- Healthy and abundant wildlife/fish throughout entire corridor
- Adaptable and resilient to climate change
- Big Sky closes the loop on water use
- Sewer ponds are so clean they are kids’ fishing ponds

- Universal/community understanding of integration of forest, water, fisheries, economy, wildlife, etc.
- Enhanced river uses for recreation/commercial cooperative team building continues

Community ideas related to outcomes:

- Engaged and educated community on water resources (also a how)
- Environmental accolades
- Big Sky becomes a model for sustainability for other communities
- Showcase how community collaboration can work to solve community problems
- Big Sky emerges as a leader/template for other communities to follow
- Bozeman and Ennis praise Big Sky's water use
- Stable Big Sky community that leads stewardship efforts
- Collaborative group is a building block for the community
 - Building block for other community collaboratives
- Cooperative multiplier 1+1 = 11
- 100% stakeholder agreement
- Through community listening sessions, community ownership expanded
- Sustainable tourism thrives, creating economic prosperity
- Robust economy and sustainability community
- Sustainable economy for developing sustainable workforce practices and housing
- Cooperation
- Community members buy into solutions resulting in community pride
- Minimal impacts to established downstream users
- Nationwide/worldwide model for development and protection of natural resources

Potential Indicators:

- Stream flows = to predevelopment levels
- Zero failing septic systems in the Canyon
- Clear metrics for buildout/protection of current resources

"How" ideas that may yield strategies once goal statements are crafted:

- Successful green infrastructure projects
- Variety of acceptable options for wastewater disposal
- Surplus of water management options
- Wild & Scenic River designation
- Innovative practice to address reducing water use, climate change issues
- Land conservation of high priority areas
 - Mandatory protection of waterways

- Wetland restoration (Restoration itself is a “what” – the methods of achieving it are a “how”)
- Wise and efficient use of water resources
 - Pond uses
- New uses of effluent actually create effluent shortages
- Cooperation and compliance without coercion
- Springboard for other environmental issues
- Litigation of water quality becomes a non-issue
- Options for coordination/collaboration with downstream users to create an integrated water management plan for the whole Gallatin watershed
- Communal awareness of water conservation and support of drought planning product
- Plan to solve Canyon issues
- Fully integrated water resource management
- Integrated water resource supply management, working within carrying capacity/supply capacity
- Eliminate one-off solutions by developers
- Development goes forward in an environmental friendly manner, resulting in a prosperous Big Sky
- Growth creates sustainable base for long term
- Zoning in Madison County and rezoning in Big Sky
- Information easy to comprehend
- Community acceptance of need for discharge permit
- Solutions not so expensive that most people can't live here
- Growth rates balanced with sustainability in Big Sky and Valley
- Good clear way to communicate so all understand, have knowledge and can relate to solutions
- (City of) Big Sky received accolades [Accolades are an outcome; “city” is a how idea.]
- Unified management of water/sewer/ecology
- Protected/enhanced river uses for recreation/commercial cooperative team building continues