



SALT LAKE COUNTY WATER QUALITY STEWARDSHIP PLAN VISIONING SESSION

September 21, 2006
Utah Cultural Celebration Center
West Valley City, Utah

MEETING MINUTES

Introduction

Natalie Rees of Salt Lake County welcomed everyone in attendance and discussed the combined meeting for the Jordan River Watershed Council and Visioning Session for the Water Quality Stewardship Plan.

Watershed Planning Background

Steve Jensen of SLCo provided background information on watershed planning.

The watershed plan was last updated back in 1975.

There was no focus on tributaries until recently.

Steve described the total watershed as the entire areas in their entirety (physically, chemically, and biologically).

Steve also described what stewardship means. In general, it means cleaning up, planting, getting dirty, etc.

The County wants to generate stewardships on each subbasin drainage.

The plan is to identify and update the master plan on the Jordan River Corridor.

The focus is not to recreate what has already been done. There have been many studies already completed. The plan is to use the information already available, as well as getting the information we don't have.

Little Cottonwood Creek, Emigration Creek, and Jordan River.

Stewardship Plan

Natalie spoke about the stewardship plan and that there would be three phases:

1. Vision
2. Putting it together
3. Putting it out to stakeholders to buy in.

Watershed Planning Structure

Karen Nichols of Stantec Consulting introduced the SLCo Water Quality Stewardship Plan and discussed the watershed planning structure. On-going studies or parallel programs will be utilized to put together this stewardship plan. Examples include:

1. TMDL (State)

2. SLC Watershed Plan (SLC) - This study covers 7 primary canyons
3. Envision Utah
4. West Bench Plan (Kennecott Land)
5. Jordan River Parkway Plan (SLCO) – Lynn Larson of SLCo spoke about this plan; Landmark Design will be doing the master plan. There are still 7 or 8 gaps in the trail system. The plan will focus on the trails and where they affect the riparian areas.

Roadmap of the Plan

Jason Doll, a watershed planning expert with Stantec Consulting in Raleigh, NC gave an overall picture of the comprehensive watershed plan and how it affects water quality. He stated that the plan will not all be about water quality. The focus will be to take full advantage of prior plans instead of reinventing the wheel.

He spoke about three primary impaired tributaries: Jordan River, Little Cottonwood Creek, and Emigration Creek.

Jason identified the four key ingredients of a successful watershed plan:

1. Technical Assessment – Consultant Services
2. Local Stakeholders and Resource Professionals
3. Watershed Assessment and Water Quality Monitoring
4. Team Coordinator/Local Partner to assist with local involvement and implementation = SLCo

The basic dynamics are:

1. The interest to improve things
2. Protect assets
3. Ability to work together

The plan is to build a conceptual model linking functional deficits to causes and sources. (sources, stressors, impact, functional deficit – need to identify relationship between these)

Watershed Planning Protocol:

Scoping
Detailed Assessment
Management Evaluation
Watershed Plan
Implementation (who, what, when, how, \$\$)

Adaptive Management:

Scope/Characterize
Detailed Assessment
Target Management
Implement and Monitor

Jason gave an overall picture of the various healthy and degraded watersheds that he has worked on. This gives a good picture that it is not all about water quality.

Key Watershed Management Elements

A brief overview of the presentation to the Council of Mayors was given. All mayors had representatives present at the Alta meeting.

The mayors were introduced to the watershed functions and to the six targets. There are a lot of drivers involved in a watershed plan: the primary driver may be regulatory. Another driver may be trying to get funding sources for the projects, as well as a social driver. The mayors and the communities are getting hit with development growth. On the other side is the preservation issue. These drivers, projects, and targets were discussed. The Cottonwood Heights Proposal was described including the County debris basin (flood control facility), which is being looked at to retrofit to a sandy beach, fishing and urban recreation facility (near Knudson Corner). It's not meant to hold water, but for holding debris and then getting cleaned out.

Urban Fisheries: Murray, South Jordan, Sandy (being located along Jordan River and using that as source of water). Providing focus points on more recreation areas along Jordan River.

Effects of the Great Salt Lake, tributaries, and the west side: Great Salt Lake Shore line has opportunities has provide recreation opportunities as well.

Preserving corridors along creeks is a hot topic right now. Jason recommended that people talk with their mayors to get their priorities and bring them back to the committee.

The 6 targets were presented to the mayors, as presented today:

- Improve water quality
- Develop regional wastewater planning procedures
- Evaluate the effects of Utah Lake and the canals on water quality
- Restore and protect stream channels and banks
- Increase preservation of stream corridors and groundwater recharge areas
- Develop strategies to improve stream flows

Watershed Functions: Convey flood waters, provide habitat for fish and plants. Macro invertebrate monitoring? Salt Lake City has done some macro sampling.

Focus Areas:

- Hydrology
- Habitat
- Aquatic
- Terrestrial Water
- Water Quality
- Water Supply
- Recreation Aesthetics

A comment was made that water rights should be included. Jason stated that where he lives water rights is not an issue, but is an important issue in this case.

Jason went through some examples of healthy and degraded systems. He asked which systems in this area are affected with problems. Some of the answers were:

- Average annual rainfall: ~15" per year in Salt Lake Valley
- Stream erosion
- Someone says we have it all
- Emigration Creek
- Little Willow in Draper
- Aquatic habitat
- Low dissolved oxygen areas: Jordan River
Don't want to look into this too much because it TMDL study is addressing this.
- Inadequate Stream Flows: East Canyon, Big Cottonwood
- Straightened Out Streams cause sheer stress. Systems with this problem include: Jordan River – upper reaches, Bluffdale area – part of the Jordan
- Big Sediment deposition areas: None mentioned
- Pinch Points: West Side
- Wetland Systems = high or low functioning riparian
- Willow Systems
- Invasive Species: Russian Olives
- Non-functioning Hydrology
- Head cut
- Roadway undermines

Possible solutions to these problems were discussed:

- TMDL process. Investigate problems with stream with functions at WWTP.
- Non-point sources: we are the problem, pay more attention to what we are doing. Change our habits (wash car on grass, not driveway, scoop the poop, etc.)
- Natural channel design principles to restore stream erosion.
- Reconstruct new channel.
- You can use the depressions from remnant channels to build a series of wetlands to connect to new channels (good stormwater BMP).
- Excavate out flood plains, alleviate stream erosion, install biologically engineered devices, allowing stream to drop its grade gradually. Placing rocks properly in the stream.
- Splash pools that dissipates energy coming out of stormwater pipes.
- Cascades with side protection so there is no blowout from pipes. Dissipate stormwater energy.
- Treat water quality problems before they come into the stream.
- Stormwater BMPs: Wetlands/floodplain bench, rain gardens/bioretenion cells, Greenway trails, traffic islands retrofit to rain gardens. Sustained campaign to identify these opportunities for rain gardens. No big land requirements for rain gardens. Integrate into landscape. Grass rain gardens, constructed wetlands.
- Urban restoration may mean moving sewer and water pipes. Culverts block fish movement. Absolutely worth it!

Residential:

- It was mentioned that each Town or City should have low impact designs. Sandy City mentioned that they have several subdivisions that are environmentally sensitive.
- Home Builders Association has LID initiatives going on.

- They have found that purchasers are willing to pay more if their subdivision was built in an environmental sensitive fashion.
- LID if it is done right can be more profitable
- Harvesting rainwater
- Don't build on high slopes, sensitive and erodable soils
- Leave more green space
- LID is the comprehensive design to mimic the natural hydrology of the system
- Clustering: is not the instant solution
- Developers either need to spend a lot more money on ponds or figuring out how LID works and implementing that.
- Potential Elements of the ultimate Watershed Plan:
 - ▷ Information obtained from the Detailed Assessment
 - ▷ Identify stream and wetlands projects
 - ▷ Local growth management initiatives
 - ▷ Stormwater (maybe not agricultural BMP projects)
 - ▷ Aquatic habitat improvements
 - ▷ Strategies to restore/protect hydrologic functions
- Trapezoidal channels: not good habitat
- Are we willing to work together and make things happen? Don't think about the channel system as a problem. Channel system is a set of opportunities.
- Aquatic and hydrological improvements
- Water treatment improvements
- Improvements and upgrades.
- Education and technical assistance programs
- Stormwater education programs
- Salt Lake County: 800 square miles
- Prioritize. Find out what the most immediate issues on. Find the most tangible way to improve situations.
- Spend Money. Find ways to incorporate several improvements together to save money.
- Set high priority areas
- Affect preservation of habitat with stream restoration.
- Cut down on stream erosion by reconstructing streams
- Retrofit BMPs
- Constructed wetlands
- Ponds – the ACOE and EPA. Cannot put a treatment device in flowing streams to not allow fish movement.
- Site ownership
- Public ownership
- Everything costs money
- Protect wildlife habits
- Stream restoration – can become a public relations problem. Excavators in streams, causes complaints from local citizens
- Infrastructure constraints – moving bridges, roads, causes issues \$\$\$
- Stressor reduction
- Cost effectiveness
- Rate systems on feasibility and effectiveness. Placement in the watershed.
- Rebuilding natural functions

Jason requested comments regarding the Draft Goals and the six Strategic Targets. He reiterated that this plan would not redo to TMDL process. The following lists some of the discussion topics:

- West Bench Planning Document – Update. This plan is to develop 50,000 in Oquirrh Mountains
- 208 Plan in 1978 was geared towards wastewater planning
- POTW is mostly districts. Cities are encouraged to join this committee
- Extensive canal system – north and south. Water coming out of Utah Lake. TMDL is going on at Utah Lake. What effect does this have on water in Salt Lake County?
- Are there things we can do to enhance in stream flow?
- They are reaching out to irrigation companies and municipalities
- Looking at survey of the population of the public. What do they want? Open space, trails, and would they pay money to protect them, etc.
- Some water rights are out there that are not being fully utilized
- Do we want to put water in those that are naturally intermittent stream? No.
- Start looking at things that are not naturally dry but that are interrupted.
- Funding
- Identify a funding mechanism to update plan on a regular basis.

General discussion regarding the targets

Comments on the six targets were requested and resulted in an active discussion. The comments/questions are as follows:

- In this first phase, will there be an inventory on wetlands or areas that are in danger or already impacted? So many miles of river and banks. Will an inventory show after 5 or 10 years that this has been improved? Very detailed assessment is currently being worked on. Intent is to do detailed analysis.
- Do we measure trail corridors or miles of trail?
- Studies of wetlands along Jordan River.
- Need to touch on Ecological Health Index: County is on a big push for performance measurements. How do you evaluate? How are we going to measure our performance in that area? County will come up with Ecological Health Index (EHI). Need to develop a measurable index. The intent is to follow-up in 5 to 10 years and conduct an analysis of these systems. The index will grade ecological health of systems (aquatic, water quality, hydrology, social, recreational, etc.). This should not be a complicated process.
- A lot of this information already exists; it's a matter of putting this together.
- Implementation: Should one of the strategies be how to make this a stewardship plan? How to integrate into communities that are affected? How to educate the public?
Yes, we are going to be doing this although it won't be a strategic target.
- Stewardship means bring it down to the dirty blue jean work.
- SLCO will be conducting a survey of county citizens about their knowledge of natural resources, watersheds and functions. This will get a base level of knowledge of where everyone sits on these issues, and how do they use these natural resources. Other surveys stress you live in the watershed, you work in the watershed, what do you know about it. Hopefully we will see from this survey where to focus the education program and stewardship.
- Mayors and Cities are approving projects, but don't see a lot of these projects with water quality and stewardship in mind.
- There has been a lot of money in water quality and stormwater management. Every City is improving, but this is not being publicized. They're out there but do not have the visibility.

- Stewardship should be in your ordinances.
- Grants
 1. Work on the Alta Fen project.
 2. Grant for the Watershed Conference
 3. Ecological Seminar
- Salt Lake City has “keep it pure” program
- We need a good program to check on these restorations projects to make sure they are happening
- Best way to get word out on all these projects: a broad spectrum of media is needed. It’s easy to update and track projects on websites. What is the best mechanism when we start monitoring?
 - Not sure there is a best way at any level. It has to be multi-faceted, multi-media.
- Are we thinking about the downstream effects? Specifically, Farmington Bay Integrated approach. Have to work with state and end users, all the way down the line. Do not want to focus on an end point.
- Shorten the language in the targets.
- Concerned that funding (#7) is lost, advocate that funding remain a target.
- Implementation plan that will identify funding sources - we need to start thinking about this now. Capitalize on opportunities and devise solutions. Propose projects that are ultimately implementable.
- The Utah Lake target (#3) seems more of an objective or the assessment rather than a strategic target. The target is potential management programs where we control, to the extent we can, the diversions to protect water.
- Targets should be written to be more active
- Stream alteration people are starting to put in 50 foot or 100-foot buffers.

Targets will be finalized within the next couple of weeks. In order to get an idea as to the priorities of the attendants, the targets were put to a vote. People were asked to vote on which target they considered to be a priority. The results were as follows:

Target No.	Target	Vote
1	Water quality	17
2	Wastewater planning	5
3	Utah Lake effects	6
4	Stream bank protection	14
5	Stream corridor	15
6	Stream flows	6

Mayors top two were: water quality and wastewater regional planning. Next two were stream restoration and corridor preservation. Last two were Utah Lake and main stream flows.

Additional comments:

- Target #4 – “Restore” makes it sound like you will restore all stream channels within the watershed. Suggest putting wetlands in 5, not 4. It works better.
- Mark Atencio commented that there are problems with the language in #3. If you have a target to just evaluate how do you know when you are there? What are you trying to accomplish with this target? Should say mitigate instead of study - get more specific.

- Karen Nichols stated that there are a lot of factors affecting Utah Lake, and a lot of different perceptions.
- Need a treatment process for treating Utah Lake water. What are the benefits and what would it cost? We plan to treat water from Utah Lake. JWCD has a study they are working on... Not finalized yet.
- This is first year objectives. One objective would be to understand this better in the first year. These can then be adjusted.

Those interested in Jason's presentation were directed to the Jordan River Watershed Council's website: waterresources.slco.org

It was noted that stakeholder participation and "buy in" is a crucial element to the success of this Plan. This will be an active process over the course of several years with regular meetings, and establishing subcommittees.

Participants were asked to submit a response card and identify subcommittees they would like to join. Sullivan Solutions collected the cards and summarized the responses.