Source Water Protection & Watershed Management in Washoe County

DRAFT MEETING NOTES

Source Water Protection Program

Team Meeting

Date: April 11, 2017
Time: 2 to 4 pm
Where: TMWA Office Independence Room
1355 Capital Blvd. Reno, NV 89502

Attendees

- RCI: Lynn Zonge, Jill Sutherland
- NDEP: Kim Borgzinner, Birgit Henson
- NDOT: Zack Blumberg
- City of Reno: Theresa Jones
- City of Sparks: Karen Melby,
- One Truckee River: Meg Parker, Emily Ulrich
- Stantec: Terri Svetich, Jeff Curtis
- TMRPA: Chris Tolley
- TMWA: Kara Steeland, Christian Kropf, John Enloe, Robert Charpentier
- Washoe County Remediation District: Chris Benedict
- Washoe County Community Services: Vahid Behmaram, Walt West
- Washoe County Health: Chris Peterson

Handouts

- Agenda
- Source Water & Watershed Protection Program in Washoe County
- Examples of Funded Projects through the SWPP and 319 Grant Program
- Draft Examples Related Plans and Resources
- One Truckee River Management Plan Goals

Welcome

Jill and Lynn welcomed everyone and thanked them for coming. Everyone introduced themselves.

Program Catch Up / Re-Cap (RCI)

Jill Sutherland and Lynn Zonge presented a PowerPoint starting with background about the programs and process, as well as the accomplishments to date (see handout frames 1 through 7).

This meeting builds upon the history of water resources cooperation in the Truckee Meadows.

Jill described how the meeting today is a progression of the past planning and plan implementation efforts for water quality protection.

- The One Truckee River (OTR) Plan, completed in 2016, identified watershed management and source water protection action items to protect water quality of the Truckee River.

- In response, three programs are working together to achieve what they can't do alone.

Truckee Meadows Regional Storm Water Program	Has projects identified and watershed data. Needs funding sources for projects.
State Non-Point Source Program	Has funding for projects. Needs EPA approved Watershed Management Plan to approve funding.
State Integrated Source Water Protection Program	Has contractor available to for assistance with Plan Development. Needs to include protection of community drinking water sources.

The "Plan Development" process

Jill reiterated the process for the Source Water Protection and Watershed Management plan follows the same general steps:

1. form team	5. protection strategies
2. gather information	6. action plan and public education
3. characterize groundwater and watershed	7. Public review and local approval
4. contaminant evaluation	

What have we accomplished to date?

Jill described what the effort has accomplished since program initiation in the fall of 2016:

- Contacted stakeholders to participate in voluntary plan and from the local planning team. An initial stakeholder meeting was held in March 2017.
- Coordinated with the regional storm water committee regarding completion of a "data gap analysis" which is being prepared by Stantec.
- The WRWC, TMWA, Washoe Health District, and City of Sparks have invited the source water protection planning process into the community.

Existing water quality protection measures in local plans & the planning framework (RCI)

Jill provided an overview of the water quality components existing in the regional Master Plan framework, local Utility/facility Plans, and other resource management plans (see handout "Draft Examples of Related Plans and Resources").

Regional Planning Framework	
○ Truckee Meadows Regional Plan	○ Sparks Master Plan
○ Comprehensive Water Regional Water Management Plan	○ Reno Master Plan
	○ Washoe County Master Plan

For Water Quality, what should be the focus of this new effort?

Lynn Zonge led three individual exercises using 3x5 cards to capture perspectives on this new effort. After each question, the group was invited to shared their ideas with the rest of the members. These ideas are outlined in the following tables as the note-taker heard the responses. The written responses (attached) are listed in the order collected rather than by any priority or emphasis.

Responses to the first question (Table 1) capture the extent and importance of water quality related roles in the community.

Table 1. What are your responsibilities regarding water quality protection?

○ development, regulation & management of storm water ○ permits, expansion & subdivisions, construction water management ○ water quality compliance & safety of drinking water	○ prevention, protection, & mitigation of contamination treatment techniques ○ monitoring ○ educating public ○ best management practices

Team viewpoints on water quality management/protection and potential issues in the Washoe County geographic area are collected in Table 2.

Table 2. What are your concerns regarding water quality?

○ funding and regulatory concerns – unfunded mandates not followed through ○ future compliance and river temperature/waste water related issues ○ inadequate/ineffective regulation and enforcement requires going above minimum required compliance to reduce impacts and characterization of storm water ○ inadequate enforcement-letting polluters off the hook ○ understanding of codes and requirements ○ imbalance of planning vs economic development ○ coordination or collaboration between jurisdictions that overlap and ability to move forward with water protection measures within those jurisdictions ○ development pushing through without planning	○ maintain high water quality in the Truckee River and ground water sources to fulfill goal of providing safe drinking water ○ potential contamination of existing wells, development/commercial pollution of wells, ○ public health and environmental health ○ beneficial use ○ availability of clean water to all communities including those with no public water system ○ nitrates in ground water getting worse ○ poor understanding or poor agreement on cost and consequences, shortsighted decisions, inadequate mitigation ○ clearly defined roles ○ education to prevent contamination ○ general lack of education ○ education and comprehension of regulatory base requirements

○ buy-in from decision makers regarding impact of development on water ○ no understanding and follow-through with plan regulations ○ lack of control under master plans and drainage plans	○ strategic targeting of tactical communications with public ○ development along surface waterways ○ forest fire impact on water ○ erosion sedimentation and pollutants to Truckee River ○ homes along Truckee River

Table 3 compiles thoughts on the best possible outcome of this effort. The best possible outcome is essentially what the group sees as the purposes of this effort, which can be used to formulate the goals of the plan development process.

Table 3. If we work together to address the concerns, what are the outcomes you would like to see?

○ Meet requirements needed for funding ○ Clearly defined, measurable and updatable goals ○ Leadership and follow-through ○ Resources to sufficiently achieve goals ○ Low cost implementation ○ Measures put in place and working ○ Ongoing useful action plan ○ Collaborative, useful, fundable, public support ○ Prioritized and implemented project across jurisdictions ○ Feedback mechanisms for future revisions ○ Establishment of baselines ○ Analysis or overview of cumulative impact	○ Create partnerships ○ Plan in everybody's best interest ○ Desirable plan – Create a culture of something everyone wants to do. ○ Stakeholder buy-in and pride in personally fostering water quality from kids to construction industry ○ Stewardship ○ Connecting and educating people ○ Public understanding of source water protection ○ Local approach: less sprawl and more independence, achieve a state of self-reliance ○ High density septic resolutions ○ Long term maintenance and upgrade of infrastructure

What should the Plan look like?

This effort combines the resources and interest of three programs which have the common purpose of maintaining and improving water quality for local communities. Lynn Zonge led one additional exercise using 3X5 cards to capture ideas about how the outcome of this process would be useful to the group and to the members individually. Tables 4 presents the range of responses.

Table 4. What does this plan need to be in order to be useful to you?

○ Meets endorsement criteria ○ Combined plan for surface and groundwater ○ Available (web based, GIS based, linked to data and resources) ○ Updatable ○ Cost benefit ○ Funding allocations ○ Collaboration, not competition	○ Relatable, positive ○ Simple tools ○ Specific, practical action items ○ Priority identification ○ Development community buy-in ○ Restrooms by the river ○ Emergency preparedness ○ Workshops and public well owner outreach

Next Steps

- RCI will compile the meeting notes and card responses and send them out to the team for review, edits and suggestions for the next meeting.
- Lynn mentioned that a public meeting had been discussed for May 16th but that this will be delayed until the planning process is at a more appropriate point to engage the public and instead individual meetings would be held with other stakeholder groups such as The Nature Conservancy.
- As a reminder, all of our meeting notes, presentations, and handouts are available on the project website at http://www.rci-nv.com/source_water_protection/
- The next Team Meeting will be June 15, 2 – 4pm at the TMWA office.

Source Water Protection and Watershed Management in Washoe County

RESPONSES TO QUESTIONS April 11, 2017

Source Water Protection Program

Q-1 What are your responsibilities regarding water quality protection?

- Not sure about any state law/regulations for water specific subjects that apply to EPA.
- General consistency with regional plan goals and processes. (Chris)
- To encourage and support the development and implementation of source water protection plans at the local level.
- To promote and support the mission of NDEP – To protect and preserve NV's water resources.
- State of Nevada ISWPP Drinking Water Protection Program: Coordinate and complete CSWP for Washoe.
- Develop a plan that meets criteria of ISWPP – Countywide, useful accepted by the Community.
- Providing safe drinking water to the community.
- Encouraging/supporting/working with the entities that do have regulatory authority to protect water quality to enforce the regulations (within political and financial entities).
- Storm water quality, non-point source controls, construction storm water management.
- MS4 permit regulation
- Protect, prevent, mitigate PCE contamination of groundwater in the Truckee Meadows.
- Primary role is dealing with historical/legacy contamination.
- Work with other agencies (NDEP, WCHD, Reno, Sparks) to address more recent and current issues (which can extend beyond our PCE mandate).
- Since I am working as a consultant, I do not have responsibility for a program, so personally I am responsible to implement BMPs to protect water quality (surface & ground) in my home and day to day life. Ethically, as a professional engineer, I do the best for our clients.
- To assess and monitor the impacts to water quality resulting from discharges from NDOT's MS4. The assessments and monitoring results will inform the design of mitigation efforts/BMPs.
- City of Reno Flood & Drainage Program Manager SWPCC Coordinator, Bridge Maintenance Program Manager. Water quality is at the soul of what I do for a living. It is why I chose this profession.
- As the Flood & Drainage Program Manager, flood & storm water management is fundamental to WQ, whether it is controlling channel, bank or hillside erosion to BMPs for huge redevelopments to parking lots.

  As SWPCC Coordinator I take my role seriously to steer committee toward pushing the boundaries of our regional permit & ensuing all aspects of the SWMP are moving forward updating, adhering to requirements.
- Delisting 303(d) listed waters through implementation of WSBPS.
- Restoration projects in WS's.
- Support local efforts in WS/WQ restoration.
- Reporting of status to EPA.
- Overseeing management and implementation of 319(h) program.
- Wellhead Protection Plan Development: Protecting existing sources of GW

- New well siting and design.
- Contaminant threat assessment and discussion with NDEP.
- Find clean and sustainable GW sources and protect them.
- For public= Drinking water:
  - Construction
  - Ongoing water quality/compliance
- Construction:
  - Ensure code compliance
  - Treatment techniques
  - 3rd Party review
- Compliance: Ensure water quality is maintained.
- Personally, as a planner: Look at the "big" picture" development of projects. As for the city - we regulate the storm drainage system and effects on TMWRF (sewer treatment plant).
- None. My focus is water planning and water rights with focus on quantity rather than quality.
- To bring together private and public organizations to collaborate on efforts to improve water quality and ensure optimal opportunities along and in the Truckee River.
- I am responsible for providing information to the public so they understand the benefits of water quality protection programs.
- To assist local agencies in developing procedures and guidelines to protect WQ.

Source Water Protection and Watershed Management in Washoe County

RESPONSES TO QUESTIONS April 11, 2017

Source Water Protection Program

Q-2 What are you concerns regarding water quality?

- Clean drinking water Available to all communities, Delivered efficiently
- Degradation/contamination of water supplies through imbalance of anthropogenic activity and those that enhance protection of water supplies.
- Planning vs economic develop balance.
- Public knowledge and support of WQ protection activity.
- Competition for resources (funding) that would promote projects and activities which serve to protect WQ.
- Lack of education towards current protection measures.
- Strategic communication, Messaging.
- Coordination between agencies, future funding.
- Maintain high water quality in river and GW so we can fulfill #1 above for a reasonable cost.
- Seeing deterioration in some components, Storm water related, manmade and natural constituents.
- TMWA's primary concerns for surface water are high turbidity events and chemical spills, although all water quality improvements upstream of the Glendale WTP intake are helpful.
- Issues for groundwater include contaminants, like nitrates, in Spanish Springs.
- Large scale forest fires are a concern for water supply.
- With increased development, I have concerns about degraded water quality from non-compatible uses, such as high development along surface waters.
- Ever increasing regulatory requirements leading to increased costs to communities.
- A lot of studies but no funding.
- Decision makers don't always understand/appreciate the consequences of water quality impacts (from a cost/duration perspective).
- Roles and responsibilities for mitigation not always clearly defined or engaged effectively.
- Mitigation measures are sometimes defined or considered in a silo.
- The lack of funding to make improvements at existing "hot spots", inadequate governance (regulation & Inspection) to prevent problems from occurring. The drive for development & economy being greater than protection of water resources.
- How NDOT's MS4 impacts water quality and other ecologically sensitive resources. There has been very little characterization of storm water discharges from NDOT's MS4. Therefore, it is difficult to truly understand the impacts that NDOT's MS4 is having on water quality. How does NDOT contribute to 303(d) listings and TMDLs. How to convince the department to go above and beyond MS4 permit requirements. How to most efficiently mitigate water quality issues. NDOT is somewhat limited to working within our right-of-way. Many water quality issues would be better addressed outside of our right-of-way
- Development, Development, Development & the impacts thereof.
- WQ mitigation looks great as policies in master plans & as lines in plan sets. It

rarely, rarely, rarely works on the ground. I see this all day long in my everyday tasks. Hydro modification, encroachment into streams, ephemeral channel erosion from storm drain out falls, detention basins that don't detain, infiltrate, etc.

- Lack of maintenance, cumulative impact of development, lack of will to enforce.
- Surface water SDWA Exceedances of CWA standards to meet beneficial uses.
- Spills/contamination
- Urban runoff
- Erosion/sedimentation from uplands.
- Temperature
- Tributary component of pollutants to surface water (Truckee).
- Good housekeeping: roads to residential practices.
- Contribution
- Development encroaching on existing wells:
  - Residential= Septics, fertilizers, pesticides, PPCP's
  - Commercial= Potential contaminant sources of greater quantity, magnitude and harm
- Source water (GW recharge area) protection.
- Integration with planners and permitting re: type and use of commercial areas near existing wells.
- Letting polluters off the hook.
- Nitrate from high density septic systems: Long-term effects and taking action to solve this.
- That water quality is maintained.
- That the design community designs it is aware of why certain standards exist:
  - Backflow protection
  - Construction materials and methods
  - don't want robots: input in - output out
  - want people to know and understand why
- Maintain and protect our water resources, including runoff/storm drainage to Truckee River.
- With the invasion of the homeless along the Truckee River – concerned about the impacts on the river and usage by community
- Impacts of new development on water quality and push/need for new development
- Public and environmental health.
- Lack of understanding/caring that we are connected to our water.
- Collaboration of all jurisdictions, major pollutants, and lack of public education about the problems.
- Not being proactive about water quality issues.
- That isolated quality issues will create undue public concern about the general quality of water in our area.
- TMDL compliance in the future temperature.

Q-3 If we work together to address the concerns, what are the outcomes you would like to see?

- Clearly defined goals (with policy, implementation) *Measurable* to determining quality of effort and future revisions or identifying other measurable components.
- A collaborative, approvable, project driven fundable, implementable community based supported WQ protection plan that is useful to WC agencies – then implement it.
- Promotes a synergistic approach to WQ protection.
- A plan that has so much public support it enables decision makers to prioritize WQ protection.
- Identify funding gaps (Chris Benedict)
- Management approval to work outside of mandates.
- Ability to move forward with Action Plan. (Jill)
- Continue to build recognition of water quality into everyone's understanding and daily life.
- When we (ISWPP) leave, projects and processes stay alive.
- We don't have to shut off the WTPs when it rains.
- OTR goals are realized along the river corridor, permanent funding source for implementation and O&M.
- Everyone does more, has a culture, of protecting WQ and the environment.
- Implementation of prioritized projects on the mainstream Truckee River and tributaries to reduce erosion and sediment loading.
- Collaborative implementation of wellhead protection strategies across jurisdictions.
- Summary of existing WQ data with tangible solutions (e.g. tributary assessments – what can be done to fix issues identified?).
- Quantifiable measures of improved surface water quality from completed projects.
- Well educated community on importance of water quality and what each one of us can do to contribute/be a part of solution.
- Review and clarify roles and responsibilities among water quality stakeholders (along with resources available to meet mandates) and identify gaps.
- Prioritize gaps
- Identify ways to eliminate gaps:
  - Land use planning that prioritizes source water protection
  - Getting the regulatory community (and decision makers) on board.
  - System (progressive) enforcement system to ensure accountability.
- Come up with innovative means, practical approach incentive based solutions/recommendations to support development & economic growth while protecting our water resources.
- Long-term maintenance funding to support on-going viability of structures for infrastructure. SW/WW
- Create partnerships to implement (and convince regulators to accept) in-kind and out-of-kind mitigation projects to improve water quality in the most efficient and cost-effective manner. Identification of projects and quantification of the water quality

improvements that these projects will provide.

- Streams/tributaries riparian ways would be restored.
- Redevelopment run off would be mitigated.
- WQ protection would be first & foremost, not an afterthought, not lip service.
- A coordinated, well supported and abundantly funded effort that results in implementation of WQ & WQ pollution prevention measures
- Improvements for surface and groundwater that meet all of the stakeholders' needs.
- A Plan that every stakeholder is proud to say they worked on.
- Leadership - But also, fellowship!
- Polluters paying for contaminant remediation.
- Regulatory agencies having the bravery to do the right thing.
- Planning/permitting process that takes into account WHPA's long time-scales for pollutants.
- A Plan that gets approved and implemented
- Existing high density septics converted to sewer through grant funding/cooperative funding.
- Less sprawl
- More education
- More self-reliance/independence (Fed's)
- Cyclical/ cogs on wheel (all work together: planning – design – construction – education – research – funding
- More control of own destinies
- "Tomorrow Land" (*film where their actions directly affect the world and themselves*)
- Funding for education (i.e. don't have paint contractor dumping paint into storm drains).
- A plan that can use in the review of projects that sets thresholds/standards to regulate the development.
- Produce a simple usable plan for all public water systems.
- Everyone working together, caring, paying attention and processes in place for such…..
- Ultimate stewardship of the river.
- Educated and involved community
  - No pollutants dumped in storm drains/trash on the river.
- A public that understands the objectives of source water protection programs and what they, as individuals, could do the support water quality.
- A workable, affordable plan which when implemented works and has political and social support of the community.
  - A plan that doesn't work against us.

Q-4 **What does this plan need to be in order to be useful to you?**

- Personally: Stewardship of water resources community goals
- GPS data for watershed – shared between agencies and jurisdictions.
- Meets requirements of plan elements.
- Approved by agencies.
- Combined WQ plan comprehensive.
- Single Plan: One plan to minimize duplication of effort and maximize effectiveness.
- Take advantage of resources planning for water quality.
- Living, implementable, fundable –
- Integrate tasks with OTR oversight and funding?
- An implementable action plan for measured water quality improvements.
- Integrated plans for groundwater and surface water, but with geographic constraints to only address Truckee River Watershed for surface water, even though groundwater addresses entire county.
- Fits within one Truckee River Action Plan framework.
- More specific projects to improve water quality.
- Clear scope for geographic extent of watershed management plan.
- Needs to be holistic/dynamic and something all local stakeholders embrace and commit to.
- A plan approved by NDEP/USEPA that meets the 9 required elements so that WC entities are eligible for 319 funding.
- Identification of high priority water quality improvement projects and quantification of the water quality improvements that the projects will provide.
- The Plan's action plans from all stakeholders are fundable perhaps not on a competitive basis or should I say money for all stakeholder priorities.
- The nine elements of an EPA WSBP.
- Lists of implementable projects
- ID of $ sources
- Web based interactive GIS based Plan:
  - that links to the data
  - is able to be easily updateable
  - is neutral
- It needs to be understood and supported by:
  - Public
  - Regulators
  - Politicians
  - Planners
  - Implementers
- Implementable
- Understandable
- Enforceable
- Cost-benefit
- Relatable
- Positive/non-confrontational
- "Public Service Announcements"
- Utilize existing resources:
  - Schools
  - Construction/BANN/EDAWN
  - Public/private
  - University
  - Polls/surveys
- Action/reaction
- Identify targeted areas and establish priorities of improvements. (City of Sparks – Karen Melby)

- Policies that can be used when reviewing a project to recommend changes to development and incorporated into local plans/regulations.
- Collectively work as a region and community commitment.
- Mapping that can be used for analysis of projects.
- Simple enough for average resident to use.
- Provide a "pull out" section for private/domestic well owners to use.
- Needs to have practical action items, with a clear understanding of who is implementing each item and timeline for each action. Collaboration with OTR on this effort. Defined demographic this is targeting.
- Approved and fully-funded plan broken down into clear objectives and tasks that can be clearly communicated – in terms of their benefit – to all relevant audiences.
- Implementable and simple/well organized.