

Priority Actions, Post Summit

- 1. Facilitate regional collaboration (and funding therefore) with Jemez y Sangre, Espanola Basin Regional Planning Issues Forum, and non-profit groups. Leads: Charlie Nylander and Paul Paryski
- 2. Provide education in the schools and to consumers regarding water conservation and managing landscapes. Lead: Jan-Willem Jansens
- 3. Develop a regional clearinghouse of data and laws related to water issues. Lead: Charlie Nylander
- 4. Select one or more existing neighborhoods and the Northwest Quadrant for doing demonstration projects. Lead: Kris Swedin

Wednesday, 21 September 2005

7:30-8:15 a.m.	Registration and Check-in
8:30-9:00	Welcoming Remarks: Bill Hume, Director of Policy and Issues for New Mexico Governor Bill Richardson; and Larry A. Delgado, Mayor, Santa Fe
9:00–9:15	Workshop Objectives:
	How can we better manage our landscapes for water quantity and quality?
	Paul Paryski, Jemez y Sangre Regional Water Planning Council and Governor's Blue Ribbon Water Task Force
9:15–10:15	Introduction: Charlie Nylander, Water Research Technical Assistance Office, Los Alamos National Laboratory; Amy Lewis, Hydrologist and Water Resource Planner—Overview of hydrologic cycle and water budgets
10:15–10:30	Break
10:30–12:00	Concurrent Sessions: Techniques and Case Studies.
	<u>Don Elder</u> , Director, River Network—Managing rivers for ecosystem health and water quality (includes Clean Water Act) (Room 1A) Tonic: Managing rivers for ecosystem health and water quality (includes Clear

Topic: Managing rivers for ecosystem health and water quality (includes Clean Water Act)

20 attended, 5 questions/comments

Warm reception—several testimonials from the audience

Key issues:

- Funding sources for matching grants
- Discussion of services of River Network
- 319 Program discussion –has had 13% cuts but also has new planning component which allows matching funds which allows the Feds to jump start programs

<u>Butch Blazer</u>, New Mexico State Forester—Managing forests and upper watershed (*Room 1B*)

Topic: Managing forests and upper watershed

13 attended, 10 questions/comments Well - received. Engaged discussion

Key issues:

- How do we make the cultural shifts within governments, tribal agencies, and private landowners? Collaboration? Esp. Middle management areas
- Issues about Workman's Comp for chain saw contractors & safety certification program
- Get the wood out of the forest in a cost-effective way without disturbing the soil
- Profitable? vs. current subsidies
- Santa Fe Watershed... law that "no wood can be removed from the watershed" therefore shredding on site. (To avoid the politics of "logging".) Spreads the chips out... like pencil sharpener... on site. Larger logs (that are too big for the machine – are left to help hold erosion.
- Are they looking at how much chips they are leaving? What is optimal? Chips holding moisture?
- Grasslands got grazed away... so now erosion...
- Schools: Does this information get to the schools? And to the grandparents of school kids?
- Watershed Institute: (each University will have a specialty)
 - Highlands University
 - Colorado University Fort Collins
 - Northern Arizona University
- Senator Bingaman's Office: (representative from)
 - Supports this conversation
 - Supports the conversation between city of Santa Fe, SF Fire

- US Forest Service... who have been meeting for 3

Department, years.

- Information sharing
- Environmentalists = the biggest stumbling block in cleaning watersheds, especially regarding endangered species and habitat

<u>Stephanie Moore</u>, Daniel B. Stephens & Associates, Inc.— Enhanced aquifer recharge: Opportunities and quantification methods (*Room 3B*)

Topic: Enhanced aquifer recharge; opportunities and quantification methods

22 attended, 7 comments/questions

Presentation was pretty technical, but interest was high

Key Issues:

- Efficiency of infiltration pond vs. normal dam
- Source of Rio Rancho recharge water
- Protecting water quality in recharge
- Deep well injection: compatibility of multiple water sources
- State Engineer regulations re check dams
- Hundreds of check dams were built south of Hyde Park Road by the CCC in the 1930's.
- Importance of impervious vs. pervious surface and how to model differences

<u>Robert Zimmerman</u>, Executive Director, Charles River Watershed Association—Making water and landscape work: re-engineering the urban water environment (Room 2A)

Topic: Making water and landscape work: re-engineering the urban water environment

32 people attended

15 questions/comments

Well-received. (2 city councilors attended entire session... people were VERY interested in his insights)

Key issues:

- Restoration began? 1995. One guy initiated the whole project. With his leadership... point source pollution was eliminated.
- Economic costs? Effect on the economy? Opportunities?
 - o Polluted vs. clean water
 - o Land near the now-clean water is some of the most valuable land, where, before it was some of the least valuable.
 - Recommend that the wastewater treatment plants be owned by the municipalities rather than by developers.... Connects the wastewater treatment plant federal requirements to what the City must deliver. Developers are not held accountable in the same way.
- Centralized management of decentralized solutions (wastewater management)? Opportunities to "undevelop" and redevelop in new ways with lower costs.
- Wastewater treatment usually does not address phosphate treatment, nitrogen treatment. Big issues without being addressed.
- Treat smaller units of water... costs less, e.g. no need for lift stations. The Biggest Cost in "getting the water "there"
- Dramatically cut costs (e.g. energy \$ to pump water)
- ** Hidden costs like RUNNING OUT OF WATER.
 - Solutions that are often suggested typically include desalinization plants... which are very expensive. Try rainwater harvesting instead.
- Decentralized waste treatment cost benefit analysis? Maintenance staff costs are not significantly more.
- Compared to Boston, Albuquerque's system is a "small system"
- "Blue building" = green buildings that work well with water & land
 - o If LEEDS is "green", then this is "blue"
 - o Blue policies
 - Bringing back 2 tributaries in the Boston watershed
- Leaky sewage pipes actually "suck out" ground water. They are losing huge amounts of clean groundwater to the sewage pipes.
 - Groundwater costs
 - o To stop this kind of "infiltration" in Boston estimates are:
 - \$24 Billion in 1995 dollars
 - \$4 Billion for other activities
 - INSTEAD: Abandon the pipes... utilize wastewater in smaller units – and put into the ground locally.
- They "put a stake in the ground" NO MORE of the same old thing.
- New fixes MUST at least BEGIN to solve the problem.
- At least, cisterns, rainwater capture... back into the local ground.

<u>Laura Weintrab</u>, Senior Environmental Engineer, Systech Engineering— Analysis and risk management in the San Juan Basin (computer modeling of watershed) (Room 2B)

Topic: Analysis and risk management in the San Juan Basin (computer modeling of watershed)

10 attended

7-8 questions

Excellent reception (noted that she was one of other vendors who could provide computer modeling)

Key Issues:

- Modeling needs statewide;
- Can modeling assist in short term & flood conditions?
- Need for stakeholder consensus;
- Need for data which becomes difficult as stations are closed
- Assumptions need to be clearly understood when examining data

<u>Sid Goodloe</u>, Carrizo Valley Ranch and Southern Rockies Agricultural Land Trust—Grassland restoration and water (Room 3A)

Topic: Grassland restoration and water

12 attended

Little time was left for questions, but 7 were asked

Presentation very relevant to group; interest high

Issues brought up in questions:

- How long does the watershed take to recover from fire?
- Do cows have access to streams?
- Interest in community harvesting of invasives (especially ponderosa pine)
- PNM biomass project
- # acres treated (3000 in 40 years) and cost thereof
- Experience with land imprinters
- Context of CO2 study in Arizona

Noon Lunch (box lunches will be available for sale)

1:00–2:30 p.m. Concurrent Sessions: Techniques and Case Studies.

<u>Jan-Willem Jansens</u>, Director, Earth Works Institute—Locally appropriate soil and water conservation strategies - Defying entropy in the Galisteo Watershed (Room 1A)

Topic: Locally appropriate soil and water conservation strategies; defying entropy in the Galisteo Watershed

18 people attended

6 questions/comments

Well received. Fewer questions because speaker took additional time to present

Key issues:

- Successes? Can you quantify?
 - o Banks of the streams and river are building back up.
 - o Increased NATIVE vegetation
 - Managed grazing (e.g. goats) helped restore plant diversity
 - Jute bags/rock dams with the goats, areas are now filled with native vegetation.
- Can you measure the financial impact?
 - Given a Million \$ in investment (half = federal, half = private/foundations)
 - o Less erosion around roads, driveways, county roads
 - o Wells are lasting longer. If they last 5 years, it saves approx

- \$5,000 per well.
- o Green environment is "prettier". Grasses are green and now going to seed. Land value. Tourism value.
- Any "irreversible" locations?
 - Yes, using them to compare... selecting those "reversible" locations to work on.
- Any "value" in the increased sponge?
 - o Green Infrastructure Plan
 - Visual qualities GREEN
 - Direct amenity value
 - For neighborhoods
 - Water purification
 - \$5,000 grant to study economic impacts
- Have tribes participated?
 - Santo Domingo has attended meetings. (Cochiti has not yet participated)
 - Santo Domingo... staffing issues, and continuity with staff changes
- How does this help Santo Domingo Pueblo?
 - Helps the watershed
 - o Mutual assistance to larger community
 - Identify value traditional to Santo Domingo Pueblo, e.g. historical/ cultural sites.

<u>Richard Schrader</u>, River Source—A case study of stream restoration (*Room 1B*)

Topic: A case study of stream restoration

<u>Charles Lujan</u>, Director for the Office of Environmental Affairs and Water Rights Coordinator for Ohkay Owingeh (San Juan Pueblo)—Pueblo riparian restoration and water quality (Room 2A)

Topic: Pueblo riparian restoration and water quality

20 attended

The presentation was mostly in the form of slides, with lots of questions (13) afterwards

Audience was very engaged and impressed

Key Issues:

- Benefits of the restoration
- Dredging method
- Lessons learned
- Which historic photos had been relied on to identify the course of meanders?
- Private wells and the impact of restoration on them
- Youth involvement
- Water rights issues and beneficial use
- Pueblo code re water management
- Use of levees for water management
- Illegal dredging
- Dealing with beavers and deciduous trees
- Website
- · Herbicide use on non-native sprouts
- Use of goats

<u>Michael Ogden</u>, Natural Systems International—The cost/benefits and business opportunities of water harvesting (Room 2B)

Topic: The Cost/benefits and business opportunities of water harvesting

17 attended (including 4 students)

8-10 questions

Warm reception

Key Issues:

- Cistern economic benefits/payback timeframe
- Drought year concerns
- Why isn't Santa Fe & NM leading the nation?
- Rainwater harvesting & enhanced recharging—discussion of how they are compatible rather than foes
- Stakeholders need to work collaboratively
- Flat roof issues in rainwater harvesting
- Evaporation losses minimized by rainwater harvesting

<u>Brian Drypolcher</u>, Trust for Public Land—Landscape water harvesting in the Santa Fe Rail Yard Project (Room 3A)

Topic: Landscape water harvesting in the Santa Fe Rail Yard Project 7 people attended

Many questions/comments

Well received, however the state engineer's office brought up still confusing legal issues... This could be an area of continuing challenge. Fine lines of legal issues.

Key issues:

- Install PERMEABLE instead of non-permeable surfaces in plaza, parking areas?
 - Debatable. Issues of who owns water when
- Public water fountain feature "shows" the SF Watershed above and below grade.
- Rooftop harvested water use?
 - Mix of ownership...
 - Privately-controlled rooftops with collection for Public landscaping use.
 - o Administrative "stuff" is tricky...
 - Who owns the downspouts? Controls the water? Owns the cisterns? Decides where the water goes?
 - Cisterns
 - o Nuances of building ownership/public land?
 - POLICIES
 - Definition of "off-site" "on-site"
 - o Railyard is a single site and is City-owned.
 - Shared parking
 - Shared storm water management plant... the whole piece of property is planned together.
 - Can off-site buildings connect to the water plan? No.
- Multi-jurisdictional "soup"
 - Transportation issues? D.O.T. Cerrillos/Cordova is "off-site" and cannot connect with water.
 - But like transportation issues, hybrid set of issues... current uses, future uses
 - o Regulatory soup
 - Public/Private joint project
 - Effluent issues
 - City as Water Company and REGULATOR as well as land-owner and water supplier
 - INTEGRATED answers
- Rooftop water used to flush toilets? NO.

- Same kinds of jurisdictional challenges as Pueblos face every day: Federal vs. Sovereign nation.
- Could be a cool demonstration project.

Rail yard is a single-site – and is City-owned.

Shared parking

Shared storm water management plant... the whole piece of property is planned together.

Can off-site buildings connect to the water plan? No.

Nate Downey, Director, Santa Fe Permaculture and Dan Ransom, City of Santa Fe—Water harvesting in residential landscapes (Room 3B)

Topic: Water harvesting in residential landscapes

27 attended

14 comments/questions

Presentation was very relevant and of great interest

Key Issues:

- Bunyips are easy to make
- How deep to make percolation tubes
- Designing gabions
- Swale's contribution to water table
- How deep to make swales
- Whether to wrap pumice wicks
- Sizing cisterns
- Use of gravel with pumice wick and in trench
- Newspaper use above pumice wick
- Pipe diameter in pumice wick
- Pipe length in pumice wick
- Whether to allow gray water in cistern—No!
- Methods to use around pinions and caliches
 Gravel vs. wood chip or bark mulch or pecans and beetle larvae

<u>Claudia Borchert</u>, Water Resources Coordinator, City of Santa Fe and <u>Paige Grant</u>, Santa Fe Watershed Association—Thinning and water in the Santa Fe Watershed (Room 4A)

Topic: Thinning and water in the Santa Fe Watershed

28 attended

Warm reception for both speakers

4 questions: Due to time constraints of having two presentations Key Issues:

- Measurements on Groundwater Recharge
- Why are there no measurable improvement water yields in tree removal areas—debate on data but a statement that there may be short term increases, but there are mid-term declines.
- Elevation study "Up for Recharge"

3:00-4:30

Legal and Political Issues and Concerns (including permits, laws, ordinances, governance structures and treaties)

Is landscape water harvesting permitted and if so under what conditions? Indian law and landscape harvesting, whose laws apply?

John Longworth, Bureau Chief for the State Engineer's Water Use and Conservation Bureau; Tracy Hofmann, Special Assistant Attorney General, Office of the State Engineer/Interstate Stream Commission; Kyle Harwood, City Santa Fe; Steve Wust, Director of Water Resources, Santa Fe County; Attorney Ann Berkley Rodgers, Chestnut Law Office/Tribal law

Legal and Political Issues and Concerns

Questions/Comments

- There is such a thing as "private water" if it remains on private property
- You always need a permit to impound water
- What is the definition of a dam or impoundment? This is a difficult issue.
- You must consider impact on senior water rights
- If you improve the soil (so that more water is absorbed), you do not need a permit (yet)
- In-stream flow is a beneficial use in New Mexico
- It's important to distinguish the language of water vs. that of water rights
- Roof water is generally not substantial in volume and diversion can protect landscapes
- The issue of whose law applies depends on where you are
- Concern expressed re using Indian water for golf courses

4:30–6:00 Poster and Exhibitor Session and Reception

Reception hosted by Emerald Earth, EM America and Earth Works Institute. Dwayne King, President, EM America

Thursday, 22 September 2005

7:30-8:00 a.m.	Coffee
8:00-8:10	Introduction to Second Day: David Coss, Santa Fe City Councilor
8:15–9:30	Economic Perspectives: Opportunities and Cost Benefits
	What are the economic benefits that landscape harvesting can provide?
	The City of Santa Fe is committed to developing efficient water-conservation and management technologies as part of future economic development.
	Kris Swedin, Economic Development, City of Santa Fe, moderator; Ken Hughes, DFA; Ben Haggard, Regenisis; Paul Paryski, Jemez y Sangre Regional Water Planning Council and Governor's Blue Ribbon Water Task Force

What are the economic benefits that landscape harvesting can provide?

Questions/Comments

• Look for root causes of problems (e.g. pollution, flooding) to achieve

- multiple goals
- Consider local ecological constraints
- Need for a hydrological study (especially re recharge zones) as a basis for planning and zoning
- Consider the economic and non-economic values of water
- The City will host a facilitate roundtable on this subject this fall
- Use existing technologies (e.g. cisterns)
- Don't keep planning and reinventing the wheel—start implementing
- Hold a design contest for municipal buildings
- We need to demonstrate the economic value of our proposals
- Climate change is a trigger and an opportunity for using a multifunction approach

9:30 Break

10:00-Noon

Concurrent Break-Out Sessions with White Paper Authors:

1. POLICY RECOMMENDATIONS, PAUL PARYSKI, Jemez y Sangre Regional Water Planning Council and Governor's Blue Ribbon Water Task Force

Top Recommendations:

- Inventory existing laws, ordinances & regulations relevant to landscape harvesting & propose guidelines, laws & regulation as necessary. Ensure compliance with existing laws. Advocate the incorporation of language that protects Acequia water rights from transfer from the area of origin to fulfill urban or other needs.
- 2) Establish OSE policy and regulations which would permit diversion for use of water that has been made available by anthropogenic changes to landscapes provided that the use does not impair existing water rights or negatively affect compact delivery obligations & as a diminimus or positive effect on water quantity; policy should determine in which cases a new right is necessary.
- 3) Establish public education programs about landscape water harvesting techniques.

Discussion points:

Laws:

- Need to be comprehensively reviewed and analyzed so that all stakeholders understand current legal status at all levels. Redundant, outdate, and ineffective laws need to be changed once this comprehensive review has occurred.
- Incentives need to be built into the laws to encourage commercial adaptation, for example, requiring master plan communities to have rainwater harvesting in all buildings and homes.

Water Rights:

- Not all at the State level, communities and local level can have an impact
- Concern over the \$6 million allocation for the state to buy water rights
- Education needed
- Comprehensive plan needs to be prepared that includes stakeholders, laws, agencies, cost benefit analysis of options and best use

- Examination of other states and countries laws and plans need to be available to enable optimal choices, technologies, and practices
- Keep water rights tied with the land rather than splitting of parts to various jurisdictions, for example, surface rights to municipalities
- Private water rights need policy review
- Acequians and First Nations agree that policy should protection their water rights from transfer from the area of origin to fulfill urban or other needs

Procedures needed to:

- Review new technologies and determine adaptation
- Establish issue resolution processes across agency and community entities
- Enable local planning input in rainwater harvesting

State Constitution:

- Rescind requirement for State Engineer to grant permits for domestic wells
- Clarify legal authority of State Engineer and establish public review process for groundwater rights being written by this office

Federal Interstate Stream Compact:

Needs to recognize First Nations

Education:

- Needed for all affected parties, to enable public support and compliance
- What are the existing laws? Roles of each agency at federal, state and local/municipal levels? Best practices of community and local efforts? Best practices and legal regulations in other states and countries? New technology's effectiveness and specific uses? Best existing technologies for specific regions and issues?

2. RUN-OFF RECOMMENDATIONS, LISA HENNE, Los Alamos National Laboratory

Top Recommendations:

- Seek funding for projects to map aquifers and identify critical recharge areas; develop runoff management plans and zoning that correspond to the local and regional hydrology. Place emphasis on the collection of information and appropriateness of where applications can/cannot be beneficial.
- 2) Develop a forum to review existing resources, techniques, laws, and local examples.
- 3) Manage runoff as a part of comprehensive system of water management to meet multiple objectives—including water quality, peak flow attenuation, groundwater recharge, channel protection, and creation of aesthetically pleasing or multi-use urban space

Discussion:

- Players: Who are they? What are they doing? How can collaboration be enhanced?
- Legal clarification needed at all level
- Education and outreach is desperately needed
- Research and monitoring need to be developed so that new and current technologies can be measured against appropriateness of

allocation and placement

1. Watershed recommendations—Fred Rossback, Bureau Chief, Forestry Division, Energy, Minerals and Natural Resources

3. WATERSHED & WATER QUALITY RECOMMENDATIONS, FRED ROSSBACK, Bureau Chief, Forestry Division, Energy, Minerals and Natural Resources & DAVID HOGGE, Program Manager for the Watershed Protection Section in the Surface Water Quality Bureau of the New Mexico Environment Department

Top Recommendations:

- Demand of agencies and invite from foundations (e.g. Coordinate with NM Grant-making Assoc. – Carlotta Baca) support for the NM Forest & Watershed Health Plan & Office. Support their recommendations, especially: remove political & lawsuit barriers; and education of public & school populations. Allow full transparency.
- 2. Continue to fund progressively effective projects (measured by water quality control standards. For example: Mescalero
- 3. Continue and improve monitoring of: water quality, water quantity/yield, vegetation, public education and outreach. Get more data. Develop measures for:
 - Aquifer improvements from watershed rehabilitation
 - Cloud seeding-quantify relationship between precipitation and stream runoff and aquifer recharge
- 4. Address root causes of polluting sources:
 - Septic waste
 - Urban runoff
 - Agricultural & ranchette runoff
 - Management of soil erosion
 - Temperature of water
 - Manage distribution of flows toward natural flow conditions

4. LAND USE RECOMMENDATIONS, DIANE QUARLES, Strategic Planner for Santa Fe County

Top Recommendations (from paper)

- 1. Conservation
- Xeric landscaping (new)
- Gray Water reuse (new)
- Household water budgets
- 2. Growth Controls
- Growth limits (water budget)
- 3. Land Use Regulations
- Performance standards

Discussion:

(From General Session summary)

- Regulative authority for water basin (input to state too)
- State Role: Water management; enforcement; gray water and water harvesting legislation; coordination with climate change task force

5. WATER USE RECOMMENDATIONS, DANIELLE SMITH, Water

Resources Planner Technician, City of Santa Fe *Top Recommendations (from paper)*

- 1. Graywater Landscaping (landscapes & irrigation cert.)
- 2. Technology
- 3. Education & Policy: Water conservation education in schools

Discussion:

(From General Session summary)

- State Role:
 - Graywater reuse legislation
 - Research re: return flow credits for leech fields and

graywater

- CID re policy and enforcement
- Limits on HOA landscape requirements
- Regional Actions
 - Database re: new technologies
 - Recommended plants (xeric, salt tolerant, native,, food
- Incentives before mandates (consider costs
- Other ideas:
 - Reduce chemicals on lawns
 - Wick treated effluent
 - Retrofit washing machines
 - Wetlands next to parking lots

Noon Lunch (box lunches will be available for sale)

1:15–3:30 p.m. Open Discussion Session with Policy Makers

What recommendations are policy makers willing to implement on a priority basis?

Presentation of Revised White Paper Recommendations to Participants and Decision Makers

Discussion and analysis of white papers by decision makers (elected and appointed officials) moderated by John D'Antonio, New Mexico State Engineer and Estevan Lopez, Interstate Stream Commission Engineer, with the objective of future implementation

What recommendations are policy makers willing to implement on a priority basis?

Recommendations include

- Inventory existing laws, ordinances & regulations relevant to landscape harvesting & propose guidelines, laws & regulation as necessary. Ensure compliance with existing laws. Advocate the incorporation of language that protects Acequia water rights from transfer from the area of origin to fulfill urban or other needs.
- 2. Establish OSE policy and regulations which would permit diversion for use of water that has been made available by anthropogenic changes to landscapes provided that the use does not impair existing water rights or negatively affect compact delivery obligations & as a *diminimus* or positive effect on water quantity; policy should determine in which cases a new right is necessary.
- 3. Establish public education programs about landscape water harvesting

techniques

- 4. Seek funding for projects to map aquifers and identify critical recharge areas; develop runoff management plans and zoning that correspond to the local and regional hydrology. Place emphasis on the collection of information and appropriateness of where applications can/cannot be beneficial.
- 5. Develop a forum to review existing resources, techniques, laws, and local examples
- 6. Manage runoff as a part of comprehensive system of water management to meet multiple objectives—including water quality, peak flow attenuation, groundwater recharge, channel protection, and creation of aesthetically pleasing or multi-use urban space

Comments from John D'Antonio, State Engineer and Estevan Lopez, Director of the Interstate Stream Commission

Opening Remarks

- Rooftop collection for domestic use is not a big problem
- Collecting runoff from parking lots or roads might be an impairment
- We can't expect to change Western water law
- Support for education, forest health, and water quality
- Who gets the benefits from improvements?

Policy Recommendations

- Need a policy re harvesting "private water" from rooftops (that addresses diversion and public welfare) vs. current case by case approach
- Supports education in the schools
- Need an inventory of laws; laws should put responsibility on the user and take into account compacts and case law
- Need caution re impairments resulting from transfers—allow local determination of use
- Reducing evaporation could help one's argument, but it is not sufficient alone (due to prior appropriation)

Runoff Recommendations

- Diversion always requires a permit
- Recharge is important—need aguifer characterization
- Supports the proposed forum
- Manage flood flows for beneficial use

Watershed and Water Quality Recommendations

- Supports NM Forest and Watershed Health Plan
- Supports watershed improvements and monitoring (measure costeffectiveness)
- Supports local watershed groups

Land Use Recommendations

- Trying to resolve conflicts among state and regional water plans
- Land use is largely a local issue—need to educate the public
- Working in critical basins and developing a state framework of specific rules and regulations

- Will begin metering in the Rio Grande basin in March 2006
- Metering will be a big help during droughts
- Requiring water rights with development—subdivision review by the State Engineer
- Use regional water plans to help overcome local competition for water
- Looking at regional infrastructure needs with support by technical teams
- More emphasis on loans vs. grants
- Support for gray water legislation, so long as return flow is considered
- Regulatory authority for water basin (input to state too)
- State Role;
 - Water management
 - Enforcement
 - Graywater & water harvest legislation
 - Coordinate with climate change task force

Water Use Recommendations

- There is no need to provide return flow credits to septic systems since they are associated with domestic wells (and therefore have enough water rights)
- They have developed a K-12 curriculum
- Support for a water budget
- State Role
 - Graywater reuse legislation
 - Research re: return flow credits for leech fields and gray

water

- CID re policy and enforcement
- Limits on HOA landscape requirements
- Regional Actions
 - Database re: new technologies
 - Recommended plants (xeric, salt tolerant, native,, food
- Incentives before mandates (consider costs)
- Other ideas
 - Reduce chemicals on lawns
 - Wick treated effluent
 - Retrofit washing machines
 - Wetlands next to parking lots

3:30 Discussion of Follow-Up and Formation of Follow-Up Group

What can be done to implement recommendations after the summit?

Recommendations:

- Graywater legislation
- Facilitate regional collaboration
- Education
- Inventory water laws
- Coordinate runoff recommendations
- Identify and remove barriers, e.g. resources, legal process, differing interests
- Do test cases
- Develop clearinghouse of laws and data
- Pick 1 or 2 top priorities
- Put all solutions into State Engineer's legal context
- Need oversight of local growth management
- Use PR to get support for one local action

- Seek state funds for implementing regional water plans
- Use City NW Quadrant and a few existing neighborhoods (perhaps in other cities too) for demonstration projects
- Education and PR
- Mandatory water conservation education in the schools
- Start meeting monthly: WRTAO, Jemez y Sangre, City, Earthworks, etc.
- Need an action plan and link to Espanola Basin activities

Consensus re Priority Actions (selected from the above):

- Facilitate regional collaboration (and funding therefore) with Jemez y Sangre, Espanola Basin Regional Planning Issues Forum, and nonprofit groups. Leads: Charlie Nylander and Paul Paryski
- 2. Provide education in the schools and to consumers regarding water conservation and managing landscapes. Lead: Jan-Willem Jansens
- 3. Develop a regional clearinghouse of data and laws related to water issues. Lead: Charlie Nylander
- 4. Select one or more existing neighborhoods and the Northwest Quadrant for doing demonstration projects. Lead: Kris Swedin

Public written comments as to concerns:

- Need an action plan and link to Espanola Basin activities
- Management for degraded watersheds
- Land Use/Water Regulator Connections
- Economic sustainability
- New water sources for supply
- Golf courses and "non-sustainable" building development that appeals to a transplanted upper class person (especially empty nesters) whose consumption of resources is disproportionate and excessive
- Priorities seem elusive
- Unrealistic goals of development vs. water planning and resources
- Poor irrigation management (especially in urban environment)
- Legal and technical solutions for equitable distribution of and access to clean water at affordable rates for all water users and for Nature = integrity of the natural environment

4:30 Closure