### **Introduction and Summary**

**DRAFT December 4, 2015** 

On July 28, 2015, the New Mexico Water Dialogue<sup>1</sup> hosted a meeting to discuss regional water planning at the Sevilleta National Wildlife Refuge. The meeting was well attended by water planners, Dialogue board members, and the Interstate Stream Commission Director and staff.

Among other topics, participants discussed the concept of "governance" as it relates to water planning and water management in the state. According to Merriam-Webster online, governance is "the way that a city, company, etc., is controlled by the people who run it." Wikipedia offers more thorough definitions: 1) "all processes of governing, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal organization or territory and whether through laws, norms, power or language" (Bevir 2013); and 2) "the processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions" (Hufty 2011).

The topic of governance is closely linked to democracy and public participation, subjects of great importance in our culture. It is tied to considerations of decentralization and sharing of responsibilities, and to opportunities for broad participation that promotes collective learning, cooperation, and partnerships among government entities and members of civil society.

In regional water planning, questions of governance revolve around who participates in the regional water planning process, how steering committees are formed and operate, how planning frameworks reflect and address the needs of multiple levels of jurisdiction, and how interregional concerns are addressed. They must also consider how the plans are implemented – whether by local governments, regions, federally-recognized tribes, or the state – to resolve critical issues.

Participants at the Sevilleta meeting agreed to form a Regional Water Planning "Governance Study Group" (GSG) to discuss these issues and make recommendations for improvements. The GSG researched examples of regional water governance in and outside the state and used them as a basis for recommended improvements in New Mexico. GSG members drafted papers on the institutional arrangements for water planning, linkages among different types of plans and among planning and administration, public participation, tribal participation, technical information, and the impact of water rights on planning processes. The GSG met by video and

<sup>&</sup>lt;sup>1</sup> The New Mexico Water Dialogue is a non-profit organization with a mission "to promote the wise stewardship of water resources in New Mexico through support of community-based forums for education, communication, and development of common ground."

conference call to discuss the group's process, clarify the definition of "governance," and refine drafts.

The GSG's issue papers (attached) contain detailed recommendations and rationales, summarized as follows:

- Statutory establishment of a new and permanent form for regional water planning entities, with authority for some aspects of water governance, distinct from but coordinating with the Interstate Stream Commission (in a model of "polycentricity")
- Overlapping regional boundaries, based on true "political and hydrologic" realities, to improve communication and coordination
- Consistency among regional water plans with shared boundaries, the state water plan, and
  other types of plans, such as forest and rangeland, environmental protection, transportation,
  land use, and economic development plans
- Institutional arrangements that encourage collective learning and consideration of issues often reduced to "externalities," such as ecosystem services and climate change
- Full engagement of a broader range of stakeholders in regional water planning entities
- Explicit consideration of frequently-omitted constituencies, such as future generations, riverine environments, water rights holders, tribal governments, etc.
- Formal acknowledgement of public comments
- Opportunities throughout the planning process for participation by the general public
- Best practices in public participation, such as a clearly-crafted message, multiple communication tools, availability, transparency, partnerships, neutral facilitators, and funding
- Meaningful and ongoing consultation with the governments of federally-recognized tribes under the New Mexico State-Tribal Collaboration Act, with explicit discussion of improvements that might support tribal participation in regional water planning, such as new forms of tribal representation on committees, long-term relationships, staff participation, tribal information and traditional knowledge, reduced inequities, and collaborative implementation of projects
- Enhancing the role of the tribal liaison in the New Mexico Office of the State Engineer
- Credible hydrological and demographic data, using common technical methodologies and working with local experts in each region
- A framework for considering climate change in water planning, and chapters on climate change impact assessment, planning, and coordination in regional and state water plans.
- Meaningful analysis of the impacts of water rights ownership on water planning
- Advancing adjudications by making them a legislative priority, exploring alternative agencies, and reviewing the OSE's multiple roles
- Resolution of other disconnects in water administration, which create inconsistencies that
  affect planning. Disconnects are evident between ISC obligations and OSE regulations,
  surface and ground water regulations, paper and wet water, water rights and actual water use,
  methods of accounting for water, impacts of shortages on senior and junior users, transfers
  from surface agricultural use to urban ground water use, state and regional public welfare,
  and water quality and quantity.
- Support for implementation of water plans, with funding and requirements for adherence to the plans

The issue papers are included as attachments: Governance and Institutional Arrangements, page 4 Strengthening Linkages, page 12 Public Participation, page 18 Tribal Participation, page 23 Technical Information, page 27 Water Rights Adjudication, page 30

#### **References Cited**

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# Governance and Institutional Arrangements DRAFT

#### The Situation

A (or maybe *the*) major weakness of regional water planning stems from the initial lack of clarity about who and what constitute water planning "regions" (or as the ISC has sometimes called them, without further explanation, "regional entities"). What did the water planning statute §72-14-43 mean to "allow" a "region" to "plan for its water future"? Who was to do the "allowing"? By what criteria would it be determined that a self-defined region had "sufficient hydrological and political interests in common to make water planning feasible"? What sort of structure could assure that all significant stakeholder interests would be adequately represented? None of these questions was addressed in the 1987 legislation. Even partial answers had to await the collaborative work of the Regional Water Planning Dialogue (now the New Mexico Water Dialogue) with a planning committee of the ISC to create a Regional Water Planning Handbook in 1994.

Beyond boundary and representation issues, scant attention was paid to the broader purposes regional water planning could or should serve. True, planners would document water needs, showing disparities between current supply and likely future demands, and suggest strategies for reducing or eliminating the "gap." All this, as well as additional information – economic projections, legal issues, demographic changes, etc. – were to be compiled into a regional water plan to be "accepted" by local jurisdictions in the region and, finally, by the Interstate Stream Commission (ISC). Such acceptance, however, did not imply that any elements of the plan would ever be carried out by agencies responsible for developing and providing actual water to users in the region. Moreover, with completion and acceptance of the plan document, it was commonly assumed that the regional planning "entity" would have finished its work and could be disbanded. Before the initial plans' completion, State funding was intermittent and often inadequate, reflecting the Legislature's ambivalence about the value of RWP. Following the ISC's acceptance of a region's plan, State support ended. No ongoing role for the entity was envisioned, nor was monitoring of the RWPs contemplated.

The current round of RWP "updates" has required the ISC to resurrect the remnants, or otherwise to grow a new crop, of regional entities to achieve the requisite level of stakeholder "participation" needed to validate changes to the plans that will produce enough consistency to enable the regional plans to be integrated into a new State Water Plan. Serious questions have

been raised by RWP participants about both the content of the updated plans and the process being used to do the updates.<sup>1</sup>

RWP stands largely decoupled from the actual processes of governing New Mexico's water resources, as documented elsewhere. Moreover, the fragmented nature of regulatory authority over water makes planning and policy coordination as difficult as it is necessary, as pointed out in another paper in this series. In these circumstances, it is not difficult to understand how commitment to participate in the RWP process would easily wane. "One-shot" or ad hoc attempts to achieve public "input" to a plan document that no one "owns" or has responsibility to implement are prone to failure. The benefits of participation are elusive, while the costs – in time, energy, and opportunities forgone, may be substantial.

#### An Alternative Approach: Planning as a Tool of Governance

Given the situation depicted above, do we really need regional water planning? Its principal intended output at this point seems to be to ratify a list of projects to be proposed for funding by the various water management and provider agencies within the region. Though not necessarily an insubstantial role, its value depends on the degree to which a multi-stakeholder planning process actually informs the decisions in setting regional priorities. Net benefits to be derived from continuing participation by stakeholder groups are the basis of motivation for public engagement in water planning in the first place.

If Regional Water Planning is to be of benefit, it must be in the context of providing a set of tools for better water governance at a regional scale. Water planning at the regional level must be done in closer synch with the agencies and actors that exercise their authority to open and close the valves. Paying attention to the design of the institutional arrangements for making that happen is important to its future success.

We describe below and recommend establishing in each region a new kind of permanent entity that might be called a "regional water planning coordination and policy review advisory board." It would be recognized in statute (unlike the current ad hoc steering committees) but would not displace existing authorities. Such a body in each region could do much to improve water governance. This will require the State (ISC officials) to be willing to relinquish some of the control it exerts over the RWP process, and to focus some of its efforts instead on strengthening institutions of local government and civil society. In this regard the concept of *polycentricity* may be helpful for understanding how our water resources might be governed more sustainably and equitably. "Governance does not require a single center of power, and governments should not claim an exclusive responsibility for resolving political issues. Instead, we should think of

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<sup>&</sup>lt;sup>1</sup> See Lucy Moore's report on the July 28 Sevilleta workshop at http://nmwaterdialogue.org/new-mexico-water-dialogue/library/water-governance.

<sup>&</sup>lt;sup>2</sup> See Brown, J.R. 2015. "Governance: The Missing Piece Required for Successful Water Planning in New Mexico" at http://nmwaterdialogue.org/new-mexico-water-dialogue/library/water-governance [Unpublished MS].

<sup>&</sup>lt;sup>3</sup> "Weak or Broken Linkages, and Strategies to Strengthen Them."

politics as an activity that goes on in many arenas simultaneously, at many scales of aggregation."<sup>4</sup>

New Mexico needs to govern its water resources in a way that takes account of what markets would ignore as "externalities," including the loss of ecosystem services and other costs we all bear as a society, now or passed on to future generations. Governing this way will require a more robust set of institutional arrangements than those that currently exist. It will involve greater decentralization and sharing of responsibilities, among a more broadly representative set of stakeholder interests, in ways that promote collective learning, cooperation, coordination, and partnerships between and among governmental entities and members of civil society at many levels. These include agencies responsible for providing water (federal, tribal, state, and sub-state quasi-governmental and private), regulatory agencies, and the full range of "appropriators" (users, including water right holders with diverse priority dates, paying customers in every economic sector, and advocates for particular public or group interests, including nonconsumptive uses). All are stakeholders, and depending on the issue at hand, may need to be "at the table."

The designation "long-term regional water planning and management groups" fails to capture this concept fully. Several questions arise. The first relates to scale. John Fleck asks "What is the proper scale for water governance, and therefore what is the proper scale for water planning?" He answers to the effect that there is no single appropriate scale for either. The concept of *polycentricity* suggests that successful governance of scarce shared resources needs to operate "in a nested fashion, at a bunch of different scales," and that "[o]nce you have the governance piece down, then you can do planning to help deal with a specific set of problems operating at a specific scale or scales."

Fleck also notes that planning "will in some sense always be at the wrong scale." But what about planning that takes place within an agency to deal with issues at a scale (geographical and jurisdictional) it sees as most relevant to its needs? An individual water provider agency's or organization's planning may often be undertaken in a "silo"; that is, without taking much account of the concerns or values held by residents of adjacent or overlapping jurisdictions, or of the relationships of an agency's policy choices to others' plans and priorities, including land use policies and decisions.<sup>6</sup>

To the extent this non-cooperative approach to governance engenders conflicts and inefficiencies, it suggests the desirability of developing institutional arrangements to provide important jurisdictional "boundary-spanning" functions at a regional (as in "water-planning").

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<sup>&</sup>lt;sup>4</sup> "Polycentric governance" is not anarchy. It suggests a way of understanding interactions among institutional actors that goes beyond conventional categories of "jurisdiction" and boundaries of legal authority. Michael McGinnis, Ed. 1999. *Polycentric Governance and Development: Readings from the Workshop in Political Theory and Policy Analysis*. (From the Series Foreword, xii.)

<sup>&</sup>lt;sup>5</sup> John Fleck, personal communication (August 9, 2015).

<sup>&</sup>lt;sup>6</sup> Regulatory authorities may also fail to appreciate fully the effects of decisions that, while focused on a single agency, may have broader consequences within a region. So, too, might user groups, in isolation, miss opportunities to advance mutual interests by misunderstanding the larger context of a problematic situation.

region") level. How should such arrangements be designed? Elinor Ostrom's work positing a set of "design principles" that characterize successful institutions for community-based management of common-pool resources (CPRs) provides a useful list of elements for consideration. Some of them may be more relevant to RWP than others, since governance activities at a regional scale necessarily involve a broader spectrum of actors. The list is at Table 1. Next to each of the design criteria are one or more questions whose eventual answers may help shape the institutional arrangements that each region may craft.

For instance, the question of geographic boundaries seems a likely starting point for consideration. While the RWP recognizes 16 water-planning regions corresponding to political jurisdictions, the 2003 State Water Plan analyzes water resource issues on the basis of hydrologic basins. Whether this discrepancy is significant depends on the purposes the regional groups are intended to serve. Overlapping boundaries, however, increase the importance of effective communication and coordination of governance actions. In any case current regional boundaries ought to be subject to adjustment to better reflect "political and hydrologic" realities and interests.

*Planning coordination*, including review of possible conflicts (as well as complementarities) among proposed plans and actions, and their implications for long-term sustainability, would be likely to be an important aspect of such an entity's work. Such entities might be called "regional water planning coordination and policy review advisory boards." Following are some preliminary suggestions about the authority, structure, and functions of a regional advisory board.

#### Authority

- 1. It should be authorized by State law, with a general legislative mandate such as "to engage water providers, regulators, and users in every region in the state in productive dialogue about their water future, and promote cooperative and coordinated action, informed by sound science, to respond and adapt to shocks to the social and ecological systems on which they depend…."
- 2. It should not be a creature of the Interstate Stream Commission; however, it is necessary that the ISC recognize its legitimacy.
- 3. It would focus on policy planning and review, maintaining ongoing oversight of activities of member entities and external actors affecting the water resources available to the region.
- 4. It should seek to develop internally, or have the authority and resources to initiate on its own, scientific and technical inquiries into the feasibility and potential impacts of proposed policies, programs and projects.

<sup>&</sup>lt;sup>7</sup> Adapted from Cox, M.E. *et al.* 2010. A review of design principles for community-based natural resources management. *Ecology and Society* **15**(4) 38. Selected are what seem to be the most relevant attributes from Ostrom's original list as modified by Cox et al. based on their empirical review of the robustness of these elements. For the original design principles see Ostrom, E. 1990. *Governing the Commons*. Oxford.

<sup>&</sup>lt;sup>8</sup> The third column in Table 1 is adapted from a set of discussion questions posed in a paper prepared by the State of Oregon's Water Resources Department Place-Based Integrated Water Resources Planning, 2014, http://www.oregon.gov/owrd/LAW/docs/IWRS/2014\_03\_10\_IWRS\_Place\_Based\_Discussion\_Paper\_Final.pdf.

#### Structure

- 5. How membership categories should be determined, and at what level, is important, given that each region has a different mix of water uses, providers, federal and state agency involvement, etc. Should certain member types be mandated, or should "broad-based" membership be required but not be closely specified (cf. Colorado's Basin Roundtables as an example)?
- 6. Should all water providers, appropriators, and regulators be represented, and should federal and state representatives participate at a level congruent with their agencies' regional concerns?

#### **Functions**

- 7. A regional advisory board could facilitate the planning processes of water providers within the region by acting as a mechanism for seeking and gathering public input for decision-making.
- 8. It could be the locus for defining (and redefining, on an ongoing basis) what constitutes the "public welfare" (including building the adaptive capacity) of the region, and for testing agencies' plans, policies and projects against public welfare criteria.
- 9. It could assemble, analyze and disseminate information regarding the environmental implications of natural processes and human actions for the region.
- 10. If properly resourced, it could initiate studies, carry out on-site inspections, hold hearings, monitor progress and provide a forum for developing a regional political consensus around water policy issues.
- 11. A regional advisory board may see value in developing a policy-level "integrated regional water management" plan for the region that would provide guidance and context for the operational plans and activities of water-related agencies. The planning process could also be a means for assuring that land-use, transportation and other plans are made with full awareness of the bio-physical realities of a region's changing water situation and the values of the region's inhabitants regarding its uses and protection.

Is the development of such regional advisory bodies needed, and is it politically feasible? The answer to the first part may differ from region to region. Not all the western states with state or regional water planning have adopted regional boundaries that cover the entire state. For instance, California's Integrated Regional Water Management Act of 2002 was passed to encourage local agencies to work cooperatively, in order to manage local and imported water supplies, improving their quality, quantity, and reliability. The California Department of Water Resources has provided competitive planning grants to most of the forty-eight locally-formed Regional Water Management Groups, and as of 2014, thirty-seven IRWM plans had been adopted by the RWMGs.<sup>9</sup>

The question of feasibility is also complicated. Some roles for regional entities are likely to gain easier acceptance than others, both in the Legislature and by the OSE/ISC. But the issues posed are not new. An attempt to address them was made in 2003, concurrent with the development of

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<sup>&</sup>lt;sup>9</sup> Similarly, the Washington Legislature felt that local development of watershed plans for managing water resources and protecting existing water rights was vital. The law provides a process to allow citizens in a watershed to join together to assess the status of the water resources in their watershed and determine how best to manage them. These examples are cited in Oregon's Place-Based Integrated Water Resources Planning, 2014. See note 8, *supra*.

the State Water Plan. ISC staff convened an "ad hoc committee" of regional water planners to recommend a policy regarding the relationship between the ISC and the RWPs, the core of which was that the SWP should "integrate regional water plans except where there are overriding state interests. Where there are interests that affect both the state and a regional water plan(s) [sic], then the matter will be resolved via a collaborative effort." Overriding State interests were matters where state agencies have "statutory authority and responsibility," requiring "policies that guide both the State and the Regions." The draft report continues: "To accommodate and protect the diversity of New Mexico some planning activities must be addressed at the regional level." Those activities included water banks, conservation programs, and notably, public welfare. 10

If this report had been adopted as an operating policy, that statement would be significant as recognition that regions have the authority to say what constitutes "public welfare" within their territory, which the State Engineer must take into account in his determinations.<sup>11</sup>

These recommendations do not ask the State to cede its authority to regulate, but allow the region to plan for its water future, engage the public, implement the recommendations and monitor progress. Local knowledge and value perspectives, backed with the best scientific information available, can help New Mexico become more resilient -- more responsive to changing needs and circumstances. Constituting the regional advisory boards to play these important roles is an exercise in the design of institutional arrangements to which all stakeholders should find good reasons to contribute.

<sup>&</sup>lt;sup>10</sup> The draft report of the ad hoc committee can be found in the New Mexico State Water Plan 2003. Appendix C.

<sup>&</sup>lt;sup>11</sup> A third category of issues identified by the ad hoc committee are several that involve both State and regional concerns. "Differences that arise between regions, or between regions and the state[,] require procedures and criteria [for resolving them] developed in a collaborative effort between regions and appropriate state agencies." The State has not initiated such an effort pursuant to the SWP during the decade since. (The New Mexico Water Dialogue attempted to address some of the inter-regional conflict questions in its "Upstream-Downstream" project, between 2006 and 2008.) The ad hoc committee was renamed in 2007 "The State Water Plan – Regional Water Plans Advisory Council (RWPAC)." Its last meeting was held in May 2010.

Table 1: Design principles and questions

Name of criterion	Functional Design Questions	Related Oregon Questions
(see note 7)		(see note 8)
User boundaries	Are rights and responsibilities of different categories of appropriators clearly delineated?	Q2. How prescriptive should State be with regard to composition of groups?
Resource boundaries	What are the region's geographical boundaries? What's an appropriate "regional" issue?	Q2. How prescriptive should State be with regard to borders? Should regions be state-defined (e.g., TX and WA) or should the state allow self-selection, e.g. California?
Congruence w/local conditions	Are regional appropriation and provision rules (operational, within nested system) congruent with local social and environmental conditions?	
Appropriation and provision	Are benefits to users (appropriation rules) congruent with inputs required from users (provision rules)?	
Collective- choice arrangements	Can individuals and user groups affected by operational rules participate in changing them? What decision authority exists (advisory, recommending, veto, etc.)?	Q3. Governance structures: agreements; decision rules; leadership and agendasetting roles? Q4. Stakeholder/public roles: assignment v. flexibility of membership; inclusion of neighboring entities; communication mechanisms
Monitoring actors' behavior	Do monitors accountable to beneficiaries (users?) monitor the appropriation and provision levels of actors?	
Monitoring the resource	Do monitors accountable to beneficiaries (users?) monitor the condition of the resource? Is there a trusted objective fact-finding resource (technical group) to assist?	
Graduated sanctions	Are appropriators who violate operational rules likely to be assessed graduated sanctions by other appropriators or by officials accountable to them?	
Conflict resolution mechanisms	Do operational rules include internal mechanism for conflict resolution or access to low-cost arena to resolve conflicts among appropriators or between appropriators and officials?	
Recognition of right to organize	Is the right of regional actors to devise their own institutions acknowledged by external governmental authorities?	

Name of criterion	Functional Design Questions	Related Oregon Questions
Nested enterprises	Are the governance activities of regional entities organized within a framework of nested enterprises?	Q.8 Integration: Other Planning Efforts in Oregon have separate institutional structures, requirements, and funding sources. How best to collaborate and coordinate with these efforts most efficiently?
Other issues not addressed as design criteria	What resources are available to support governance / planning process?	Q.5 Data management/plan outline: mandatory/optional elements to sync with IWRS issues? Q.6-7 Addressing instream and WQ needs: if regions to address, what technical resources should they get?
		Q.9-12 Plan adoption: by whom, sequence; process/criteria for state review; role of state agencies other than WRD at state and sub-state levels in process; funding for projects in relation to plans

### **Strengthening Linkages DRAFT**

**The Problem** - One inhibitor of effective water planning and management across the State of New Mexico is the widespread phenomenon of weak or missing linkages between components in water planning and in water management chains. The weak links prevent us from achieving the level of effective planning and management of water that New Mexico's citizens deserve.

Overview of Issue Paper – We have identified 23 weak or broken linkages and placed them within 5 categories. For each category or linkage, we have described the problem and presented the skeleton of a possible remediation strategy. Some of the broken linkages are addressed to a greater or lesser degree in other issue papers. However, until there is a remedy in place, they are still included here. The categories and linkage names are:

#### A. Plan Development Disconnects -

- 1. Public involvement inputs and content within resultant plans
- 2. Planning and minimally-represented entities

#### B. Disconnects among Water Plans –

- 1. State water plan with tribal water plans
- 2. Regional water plans with the state water plan
- 3. Local government water plans with their regional water plans
- 4. Regional water plans with their adjacent region water plans (including those in neighboring states, foreign or domestic)
- 5. Local water plans with their adjacent local water plans

#### C. Water Plan Disconnects with other Discipline Plans –

- 1. Forest and range management plans (federal, state, and tribal)
- 2. Environmental protection plans (state and tribal)
- 3. Transportation plans (regional and state)
- 4. Land use plans (local and tribal)
- 5. Economic development plans (local, regional, tribal, and state)

#### D. Disconnects between Water Planning and Administration –

- 1. Water plan recommendations and resulting implementation actions
- 2. Water plan recommendations and affected water ownership
- 3. Interstate Stream Commission mandates and Office of the State Engineer regulations

#### E. Disconnects on Permission to Use Water –

- 1. Ground water regulations and surface water regulations
- 2. Water permissions (rights, permits, etc.) vs. available wet water
- 3. Water permissions (rights, permits, etc.) vs. actual water uses

- 4. *Inconsistencies among and within entities' water accounting principles and methods*
- 5. Permitting domestic wells and urban groundwater uses in an over-allocated, unadjudicated basin versus administering the water for the benefit of senior water right holders
- 6. Reconciling 24/7 requirement for transferred water with drought dependent prior use
- 7. Regional public welfare considerations and OSE water transfer decisions
- 8. Water quality and quantity considerations

**Overall Recommendation -** We recommend that the presented skeleton strategies for strengthening each of the weak links be fleshed out and then implemented. We further recommend that the progress be monitored to assure that the resultant strategies are indeed followed. However, we also acknowledge that alternative strategies may prove even more effective.

The Weak Linkages or Disconnects – New Mexico has various regulatory regimes and plans for water and other attributes existing and being developed around the state. Frequently, plans that could affect each other are developed without sufficient consideration of possible connections. We should create mechanisms that will drive planners to give due consideration to the efforts and results of others' planning activities. There are also disconnects associated with regulatory permissions to use water. These should be explicitly addressed through the planning processes. Following are the weak links that we have identified and believe should be addressed:

- A. *Plan Development Disconnects* We have regularly observed disconnects in the planning processes in two areas:
  - 1. *Public involvement inputs and content within resultant plans* Very frequently we have seen public comment on water (and other) planning taken in a pro forma way, and then effectively ignored. The comments are often not recorded. When recorded, they are merely listed in an appendix to the presented plan.
    - <u>We recommend</u> that agencies responsible for planning be required to explicitly address each recorded public comment, stating how or where it was incorporated into the plan, or why it was not incorporated.
  - 2. *Planning and minimally represented entities* In every planning effort, we have seen that some entities are not well represented, despite efforts by the planning entity to obtain representation.
    - <u>We recommend</u> that planning entities be required to identify insufficiently represented constituencies, and to explicitly address how that entity's concerns have been duly considered in the plan, or why their concerns have been omitted. From our observations of regional water planning, the most frequently omitted constituencies and interests include future generations, riverine environments, aquifer sustainability, water rights holders, and tribal governments.
- B. Disconnects among Water Plans In New Mexico, regional water planning is disconnected from other activities. It is not linked to other relevant planning processes or to implementation of policies or projects. Moreover, we have regularly observed that water plans have been developed in a way that is effectively oblivious to the existence of other water plans. That leads to inconsistencies and even conflicts among plans. One result is that the plans are difficult, if not

impossible, to implement and are not taken very seriously after they are developed. They become difficult, if not impossible, to implement.

<u>We recommend</u> that water planning entities be required to explicitly describe the efforts that have been taken to avoid conflict and ensure consistency with adjacent water plans and with higher level water plans. Particular disconnects to be addressed here are those between:

- 1. State water plan and tribal water plans
- 2. Regional water plans and the state water plan
- 3. Local government water plans and their regional water plans
- 4. Regional water plans and their adjacent region water plans (including those in neighboring states, foreign or domestic)
- 5. Local water plans and their adjacent local water plans and tribal water plans
- C. Water Plan Disconnects with other Disciplines' Plans Across the state there are important plans being developed to address topics other than water. Frequently, water planning entities are unaware or dismissive of these external topic plans. While sometimes there is no coupling, more frequently these other plans make implicit or explicit assumptions about water.

<u>We recommend</u> that water planning entities at all levels be required to make contact with the relevant other-topic planners and explicitly describe how they have worked together to assure consistency, lack of conflict and accounting for cumulative impacts. At a minimum, the other-discipline plans include:

- 1. Forest and range management plans (federal, state, and tribal)
- 2. Environmental protection plans (state and tribal)
- 3. Transportation plans (regional and state)
- 4. Land use plans (local and tribal)
- 5. Economic development plans (local, regional, tribal, and state)
- D. Disconnects between Water Planning and Administration Within New Mexico's water management, there are frequent mismatches between decisions and resultant actions. Frequently there are systemic causes of the mismatch. We have further observed that particular connections are often ignored or given short shrift.
  - 1. Water plan recommendations and resulting implementation actions Once New Mexico's regional water plans are completed, implementation tends to fall by the wayside, and the plans simply collect dust on a shelf. It makes one wonder why resources should be spent on water planning

<u>We recommend</u> first that adherence to water plan recommendations be statutorily mandated and enforceable, at all levels of water plans.

<u>We recommend</u> further, that water planning and water providing agencies be required to regularly schedule funds to support implementation of the water plans they have sponsored or accepted.

2. Water plan recommendations and affected water ownership – Water plans frequently

recommend distributions of water and/or ways of using water without consideration of who owns the rights to that water and/or how such owners might be encouraged to comply with the plans' recommendations.

<u>We recommend</u> that regional water planning must include ownership as part of the analysis, and that water planning entities be required to explain how the recommendations can be accomplished while recognizing that water rights are property.

3. Interstate Stream Commission mandates and Office of the State Engineer regulations – We have observed cases where the Interstate Stream Commission obligation to meet interstate compacts conflict with the State Engineer regulations on permissions to use water, particularly mining of groundwater. We've observed cases the mismatches have impacted regions.

<u>We recommend</u> that an official team be appointed to identify such conflicts between ISC obligations and OSE regulations, and to propose appropriate regulatory (or statutory) changes to ameliorate the conflicts.

- E. Disconnects on Permissions to Use Water There are also weak linkages associated with permission to use water, typically associated with paper water vs. wet water. These links should be strengthened through the planning processes. At least the following specific weak linkages should be addressed:
  - 1. Ground water regulations and surface water regulations Since groundwater regulations were developed later than surface water regulations, and appear in separate chapters of the statutes, we have observed inconsistencies or conflicts between the two regulatory regimes, despite the statutory requirement to conjunctively manage our water resources. As examples, the rules of priority administration lead to such anomalies as futile priority calls, and junior users being able to drain the supplies of senior right holders. Planners need to understand a clear and consistent set of rules for administration.

<u>We recommend</u> that an official team be appointed to identify such conflicts and to propose appropriate statutory or regulatory changes to ameliorate the conflicts.

2. Water permissions (rights, permits, etc.) vs. available wet water – Historical decisions and lack of adjudication has resulted in more perceived permissions to use water that there ever has been wet water. The mismatch and its associated degradation to credible water accounting impacts regional water planning. Adjudication to resolve the mismatch is seen to require insurmountable quantities of money and time. In some basins, more water rights have been claimed and/or the state has issued far more paper permits to use water than exists in that basin. The mismatch leaves water users in a situation where adjudication of water rights and permits would result in most users getting less water than they thought they had. It clearly provides a disincentive for claimants to consummate adjudication. In fact, it creates an incentive for claimants to inject delays and additional costs into the adjudication process.

<u>We recommend</u> that the state publish an accounting, basin by basin, of the permits and rights issued or claimed, to be included in the associated Regional Water Plan.

We recommend further that the state institute a positive incentive for water rights claimants to consummate adjudication promptly.

3. Water permissions (rights, permits, etc.) vs. actual water uses – While there have been improvements, many uses of wet water are not measured. That means that water right and permit holders' actual uses cannot be compared with their respective permissions. The result is likely to be significant under or over use. Regional water planning baseline data is impacted.

We recommend that metering be required on all uses, and that the state (or other appropriate district) establish a regular automated comparison between permissions and actual uses. Furthermore, consumptive uses from all users must be measured and quantified. The resultant data should be provided to the regions on a regular basis for inclusion in the regional water plans.

4. *Inconsistencies among and within entities' water accounting principles and methods* – We have observed in many cases where water accounting methods are less than satisfactory, and certainly not consistent among entities. We have seen wet water measures added to paper water measures; we have seen additions of depletions and withdrawals; we have seen the same drop of water allocated to several entities.

<u>We recommend</u> that the state establish, promulgate, and ensure adherence to a set of "generally accepted accounting principles" for water, including standard definitions, for local entities to report their water plans and uses as well as for the regions to use in their water planning.

5. Permitting domestic wells and urban groundwater uses in an over-allocated, unadjudicated basin versus administering the water for the benefit of senior water right holders – We have observed cases where an accretion of domestic well permits in an area has had an impact on the availability of surface water for senior water rights holders and where junior urban permits have impacted senior users. The resulting uncertainty in who can do what impacts effective planning for water deployment.

<u>We recommend</u> that all junior groundwater permit users be subject to restrictions in use, especially during drought conditions.

6. Reconciling 24/7 requirement for transferred water with drought dependent prior use — When water rights are transferred from surface agricultural use to urban groundwater use, we convert that particular demand from being drought dependent to being independent of potential drought. That new inflexibility of demand impacts the state's drought resiliency.

<u>We recommend</u> that the State provide the regions with tools to deal with that hardening of demand.

7. Regional public welfare considerations and OSE water transfer decisions – Statutes require the state engineer to take cognizance of "public welfare of the state" when evaluating potential water right transfers. However, the ISC has required regions to include a statement

of public welfare for the region, not the state, in their regional water plans.

<u>We recommend</u> that a statutory change be made to require consideration of "public welfare of the region," and that the state engineer be required to explicitly address that consideration in his decisions.

<u>We recommend</u> further that a committee of regional water planners and ISC work to develop a template of what a regional public welfare statement should address.

8. Water quality and quantity considerations – We've observed cases where water quality attributes affect water quantity and where water quantity attributes affect water quality, both cases affecting regional planning.

We recommend that NMED and OSE planning for water be coupled.

**Topics for Fleshing Out the Strategies** – We have above provided some introductory guidance or skeleton material for each of the weak links or disconnects that we have identified. We recommend that these weak linkages be formally addressed in appropriate frameworks, perhaps the Regional Water Plans and/or the State Water Plan.. For each weak link, we recommend further that at least the following topics be covered for each:

- a. Title for the link that is weak or missing
- b. Description of the link that is weak or missing
- c. Consequences of the link being weak or missing
- d. Remedial actions or series of actions that can and should be taken to strengthen the link
- e. Entities that can and should take the lead in causing the actions to take place
- f. Entities that can and should have subordinate roles in supporting the actions
- g. Recommended time frames and estimated costs for the remedial actions

### Public Participation DRAFT

There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process. – Arnstein 1969

#### What is Public Engagement?

Public engagement can be described in a variety of ways. The unique aspects of each dictate what form to employ and when. Reminding ourselves of what and why may prove useful to this discussion (ILG 2015, also see Arnstein 1969).

- Public information/outreach: characterized by one-way local government communication to residents and other members of the community to inform them about a public problem, issue or policy matter. (Examples: online articles, mailings, presentations to community groups)
- Public consultation: instances where local officials ask for the individual views or recommendations of residents about public actions and decisions, and where there is generally little or no discussion to add additional knowledge and insight and promote an exchange of viewpoints. (Examples: public hearings, council or board comment periods, resident surveys, polls)
- Public participation: processes through which the public receives new information and through discussion and deliberation prioritizes or agrees on ideas and/or recommendations intended to inform the decisions of local/state officials. (Examples: conversations that provide information and ask participants to discuss community priorities, confront real trade-offs, and craft their collective recommendations; the development of representative groups that draw on community input and suggest elements and ideas.)

#### Why Engage the Public?

A successfully engaged public can be highly beneficial to planning and implementation efforts. Outcomes of effective public involvement include (ILG 2015):

- Better identification of the public's values, ideas, and recommendations
- More informed residents (the state's challenges are my challenges)
- Improved decision-making, actions, impacts and outcomes

- More buy-in and less combativeness (participation generates ownership)
- More civil discussions and decision-making
- Faster implementation
- Enhanced trust, confidence, understanding, and cooperation
- Higher rates of participation
- Leadership building opportunity

New Mexico has recognized that engaging the public in water planning is more critical than in any other area because of water's vital role in every aspect of life (D'Antonio 2006). In addition, because the waters of New Mexico belong to the people of New Mexico, public involvement, with information exchange and debate, is essential. Local experts can also provide the "credible set of hydrological and other technical data" that is at the foundation of wise water planning. (See the Governance Study Group's *Regional Technical Information* issue paper for more details.) Furthermore, the behavioral change required for water conservation and environmental protection are only possible through broad public awareness and participation. Although accepting compromise is never easy, it is possible to understand and move forward with difficult alternatives if the process of reaching them is open and shared by all affected parties.

#### **Challenges to Participation**

The public's willingness to participate is affected by many factors (Hausam 2015):

- Level of interest in the overall topic (water)
- Awareness of the program or project (regional water planning)
- Representation by someone else on their behalf
- Trust that input will truly be incorporated into the final product
- Other, possibly better, options, for getting their point across (e.g., lawsuits)
- Constraints on availability (time/day, length of meetings, location, transportation, child care)
- Appropriateness of method of input (e.g., individual meetings, small groups, large groups)
- Need for confidentiality
- Relationships among participants and facilitators (major conflicts, past histories, personalities)
- Presentation of information (language, level of technical data, jargon, etc.)

#### Public Engagement in New Mexico's Regional Water Planning

Despite the many challenges inherent in broad public involvement, it has long played a central role in the State's regional water planning. The role of public engagement is clear in the 1994 Regional Water Planning Handbook (NM ISC 1994):

<u>Purpose of Regional Water Plans:</u> Broad public participation is necessary in the
development of regional water plans to enhance their acceptance locally and to increase
their potential contribution to state decision making in regard to "public welfare" and

"conservation" determinations;

- Required Assumptions: An adequate plan for public participation shall be a prerequisite for regional water planning; and
- <u>General Guidelines</u>: A critical element of the regional water plan is public participation in the planning process. Planners must demonstrate that reasonable and diligent efforts have been made to reach the public so as to invite, value and reflect public comment. These efforts may be tailored in their specifics to fit the particular regions.

New Mexico's regional water planning emphasizes the role of regional water planning committees, as representative groups of stakeholders, in ensuring broad-based public participation. However, the committees themselves may not adequately represent all interests, and without a larger effort to engage the public at large, many voices may go unheard.

This has appeared to be a problem in the latest round of regional water planning. Although the importance of public engagement was apparent in the December 2013 of the *Handbook*, given the lack of funding for the updates, the Interstate Stream Commission (ISC) resurrected the remnants of earlier regional entities to achieve stakeholder participation (NM OSE 2013, New Mexico First 2014). However, not all entities were composed in the same manner as in the previous round. There have been concerns about an increasingly top-down approach, especially in the Mid-Region, where the Water Assembly, a community-based group that prepared the previous water plan in coordination with the Mid-Region Council of Governments, was not given a seat on the new steering committee (Brown 2015, Moore 2015). There has been limited support for meaningful public engagement across the state in this update process thus far, and upcoming efforts, without effective steering committees, are likely to fall short.

#### **Successful Examples**

In addition to the model from the 1994 Regional Water Planning Handbook, other states have defined structures for regional water planning committees that may better support a wide range of stakeholders' participation. Colorado, for example, has "roundtables" that facilitate discussions on water issues and encourage locally-driven, collaborative solutions (Bunyak and Kelly 2013). Oregon's integrated water resource management planning groups call for a public involvement process that allows members of the general public to be involved in plan development and implementation. California requires that integrated watershed management plans include a public process that provides an opportunity to participate in plan development and implementation. In Texas, the public has opportunities to participate at different stages of the planning process. Finally, Washington's Watershed Management Act requires that planning units "develop a process to assure that water resource user interests and directly involved interest groups at the local level have the opportunity, in a fair and equitable manner, to give input and and direction to the process." All states require representation from certain specified groups, but allow for additional participation (OWRD 2014).

#### **Recommendations for Improvements**

In order to be fully successful, New Mexico's regional water planning process should make a true commitment to public participation, beginning at the start of the planning effort.

The foundation of public involvement is the regional water planning entities. Entities should have broad-based stakeholder representation. The state should promote – and safeguard against the exclusion of – certain stakeholders, particularly those who may have less political or economic standing, such as community-based groups, or who may be less familiar, such as federally-recognized tribes (see the Governance Study Group's issue paper on tribal participation). Regional water planning entities should be statutorily defined and funded as ongoing groups, able to build trust and effectively engage with the public.

As regional water planning entities work to engage the public, they should use the following best practices (Bender-Keigly 2013):

- Craft the message. Make clear from the beginning that regional water planning has many
  facets, ranging from water quality, water rights, basic human rights, culture and tradition,
  and economic opportunity (and a much broader range of topics that fit under these
  headings). Repeat the message at every meeting during the planning and review stages.
  The message needs to be clear to all stakeholders, decision-makers, the legislative body,
  and the general public.
- Employ various communication tools. Although email listservs and posting to websites
  are commonly used, direct mailings, phone calls, print and electronic newsletters, press
  releases, videos, webinars and social media tools were all employed in addition to
  meetings and live presentations. (Particularly critical in New Mexico to communicate in
  Spanish as well as English.)
- Be available. Meeting people on their turf, although time consuming and costly, seems to
  offer great payback with increased public participation, creative solution options and
  support.
- Be transparent. Public should be invited to attend all meetings. Website postings of all agendas, meeting minutes, recommendations and draft reports provide the public with easy access to information and allow all water users to feel involved in the process.
- Capitalize on partnerships. Partner agencies, non-governmental organizations, water districts, member organizations, and other stakeholders can help send the message that this is a collaborative process. Side benefit: It is cost effective to use partners to advertise the planning, post water planning information, and help with meetings in each region.
- Use neutral facilitators. State agencies that played a secondary role in planning meetings found that the public viewed the process as being more collaborative. Local facilitators help build trust.
- Establish and follow the framework. Regional planning allows flexibility to meet needs of each area. Since the result is a statewide plan, a framework that guides the process is essential. Facilitators for each area need to follow the same guidelines, and rules for such things as data collection need to be identified and followed in order to meld into a

- statewide plan. Living documents encourage greater trust and involvement and allow changing needs to be addressed as they arise.
- Funding is extremely helpful to the process. In Colorado, each Basin receives \$2,000/year for education and outreach, and additional funds are available through a grant process.

It's difficult, but not *that* difficult. Just keep Jason John's points in mind. Resolve to learn a little about each other. Meet regularly, whether there's a "crisis" or not. Strive to accommodate the grassroots. Build on what you've learned. Make a long-term commitment to continue. Uncertainty wants not a calcified map, but an ongoing practice that fosters relationship, allows for the circulation of emerging data, and supports continuous appraisal of evolving conditions in real time. From such soil, tailor-made partners and sage actions arise. Process is the plan (Robert 2015).

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### Tribal Participation

The involvement of federally-recognized tribes in New Mexico (Pueblos, tribes, and Native nations)<sup>1</sup> in regional or state water planning can benefit the regions, the state, and also the tribes, by establishing opportunities for discussion and collaboration. This coordination can have many positive impacts: it is essential for cross-jurisdictional or "transboundary" projects such as watershed restoration and water quality protection; it can enhance feasibility and improve funding for water infrastructure projects; it may contribute multiple forms of knowledge and generate creative new ideas; it can reduce unpleasant future surprises (Innes 1999); and it can enhance the capacity and resilience of governance systems (Inner and Booher 2003).

#### **Issues with Tribal Participation in Water Planning**

However, despite these benefits, and the great importance of water to tribes, some choose to not participate in regional and state water planning or to participate on their own terms (Hausam 2013). As sovereign entities, tribes are not required to participate, and they may avoid such planning processes for a number of reasons.

Plans that include multiple jurisdictions, such as regional and state plans, must by necessity find a balance among all participants' interests. This sometimes results in only cursory mentions of certain critical issues for tribes: sovereignty, tribal water rights, interconnected natural systems, and cultural values. Listing tribes as participants in plans that do not truly meet their needs and that they cannot truly endorse could have the effect of co-opting them into agreement (see Amy 1983, Arnstein 1969).

Tribal participation often requires more resources than non-tribal participation. Tribal water planning cannot be completely separated from tribal water rights, so attorneys are typically involved. Other tribal participants must weigh the time and energy required for water planning against multiple other priorities. Persistence is often needed to be recognized as not being a "local government" (a subdivision of the state; see Dolan and Middleton 2015, 396); to gain seats at the table for each unique tribal government; and then to shoehorn tribal perspectives into models that do not automatically recognize them. More time is needed to travel to meetings off tribal lands.

In some cases, participation may require compromises that tribes are unwilling to make, such as signing formal agreements. In California, some tribes have been required to sign agreements that require partial waivers of sovereign immunity in order to participate in regional water planning

<sup>&</sup>lt;sup>1</sup> Hereinafter listed as "tribes," referring to the legal term "federally-recognized tribes."

(Dolan and Middleton 2015, 363). In New Mexico, some tribes have been unwilling to join another type of regional planning organization because its bylaws require sharing planning documents, which for tribes are proprietary, not public, information (Hausam, pers. obsv.).

All participants must believe that planning will lead to meaningful results in order to remain engaged with the process. Yet tribes have many reasons to be pessimistic about state-driven processes such as water planning (see, e.g., Wondolleck and Yaffee 2000):

- Histories with non-natives that include losses of land, water, culture, and lives
- Ongoing losses of "wet water" while "paper water" remains unadjudicated
- The current New Mexico political climate, which some perceive to be unsupportive of tribes
- Alternatives independent of the state, working directly with the federal government
- Limited state implementation of water plans in the form of projects, programs, and policies, particularly those that benefit tribes<sup>2</sup>

#### **Successful Efforts**

Despite these challenges, there are examples of successful coordination with tribes on water projects and policies. A recent assessment of Integrated Regional Water Management in California found that one participating tribe made a voluntary water transfer to a non-tribal utility district, founded on a long-standing relationship of mutual respect based in other projects. The transfer occurred through a Regional Water Management Group, but the authors note that "without that foundation, the water transfer and the limited waiver of sovereign immunity would never have succeeded" (Dolan and Middleton 2015, 395).

In New Mexico, over forty years of tribal and non-tribal effort and negotiation have resulted in an agreement and commitments by federal, state, and municipal government to fund construction of the Navajo-Gallup Water Supply Project. Tribal and non-tribal parties along the Rio Jemez acknowledged their interwoven histories and interdependence and worked together to create a shortage-sharing agreement among the Pueblos of Zia and Jemez and the Jemez River Basin Water Users' Association (Robert 1996). Most recently, the Pueblo of Sandia donated 100 acrefeet of water to support the Middle Rio Grande's stream flow, "in hopes it can be example of what can be done when people work together" (Associated Press 2015).

There are also examples of successful approaches to tribal participation in New Mexico's regional water planning, as directed by state law (N.M. Stat. Ann. §72-14-44.C(2)). In the Northwest New Mexico and Jemez y Sangre planning processes conducted in the late 1990s, tribes were involved as "observers," allowing them to discuss important issues without committing to the final plan (Hausam 2013). Northwest New Mexico also created a technical committee that included tribal hydrologists and other specialists.

The New Mexico state water plan also requires "(1) coordination or integration of the water plans of Indian nations, tribes and pueblos located wholly or partially within New Mexico with the state water plan; and (2) final adjudication or settlement of all water rights claims by Indian

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<sup>&</sup>lt;sup>2</sup> There are certain exceptions benefitting specific tribes, such as the Navajo-Gallup Water Supply Project.

nations, tribes and pueblos located wholly or partially within New Mexico (N.M. Stat. Ann. §72-14-3.1.E).

There is a body of literature on successful collaboration (sometimes under the headings of collaborative planning, conflict resolution, and co-management) (see, e.g., Innes 1994), with some attention to tribal participation. The role of planners in improving collaboration includes defining and structuring the planning process, framing issues, helping a group develop ground rules, gathering information and managing data, and helping a group reach agreement on the final plan. Planners can and should consider facilitating tribal involvement as part of their work (Hausam 2006). The state's responsibility is to fulfill its government-to-government relationship through consultation with tribes. States can also play critical roles in defining the structure of planning processes and framework for planning documents, and in preventing local or regional relationships, whether currently absent or adversarial, from precluding tribal participation (Dolan and Middleton 2015; also see Lane and Corbett 2005).

#### **Suggested Improvements**

We recommend that the State of New Mexico take action to improve opportunities for tribal participation.

The first step in this effort must be meaningful consultation with tribal governments under the New Mexico State-Tribal Collaboration Act. This consultation should include an explicit discussion of improvements that might support tribal participation in regional water planning. Some opportunities for discussion might include:

- Creating a new form of tribal representation on water planning committees, mandatory in each region with tribes. For example, there could be an open "observer" seat for each tribe within a water planning region, similar to an "ex oficio" seat but with the ability to vote if desired.
- Designing water planning processes with opportunities to build relationships over time. This could include longer time to complete water plans, more opportunities during meetings to engage in dialogue, education about tribal and other values for water (within or outside the planning process), or other approaches
- Structuring planning committees to encourage participation from staff with multiple knowledge areas. For example, regions could institute technical committees that encourage participation from hydrologists, demographers, planners, tribal elders, and others (from tribes and other jurisdictions).
- Designing water planning processes to explicitly incorporate tribal information and traditional knowledge. Tribal information about water demand may reflect goals to have tribal members living on their homelands; the overwhelming need for economic development to support tribal populations; cultural values and uses of water; and other needs. Traditional knowledge can contribute to alternatives and action steps.
- Requesting agenda items for meetings from tribes (and other committee members) in advance of meetings.
- Reducing inequities in the resources necessary to participate in water planning. For example, hosting meetings in varied locations, including on tribal lands, so that the

- distance and travel for participants for each meeting varies; and contributing to the cost of tribal participation in state planning processes.
- Working collaboratively to implement projects listed in plans that will benefit tribes. This can help demonstrate the effectiveness of water planning. Projects could be regional in nature or for specific tribes, in a good-faith show of commitment. Examples may include watershed management, stormwater control, and regional water supply systems (such as the Navajo Gallup Water Supply Project).
- Enhancing the role of the tribal liaison in the New Mexico Office of the State Engineer for more effective communication with tribal governments and in state-tribal meetings.
- Developing a mechanism for ongoing consultation regarding tribal involvement in statedriven water planning processes to ensure that the design of future processes reflects tribal needs.

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## **Technical Information**DRAFT

#### **Data in Regional Water Planning**

**Common Technical Platform** - In the first round of regional water planning, the regions used different methods of measuring bio-physical and demographic conditions. That made it difficult to compare or combine Region A's results with Region B's results. Accordingly, the ISC determined that for the second round of regional planning, we needed a "Common Technical Platform" for use by all regions.

Administrative Water Supply - The ISC went further by declaring that the Common Technical Platform would be a new construct called the "Administrative Water Supply" (AWS) in which 2010 withdrawals were equated to 2010 supply, with withdrawals scaled by population growth over future years. The approach is too simple. The AWS doesn't allow regional planning consideration of: (a) the data differences from the first round of regional water planning, (b) the effects of riparian and open water losses, (c) the existence and implications of groundwater mining, (d) the existence of unsatisfied demands, (e) the coming extreme climatic events, (f) the significant annual variations in precipitation, (g) steady vs. weather dependent demands, (h) differences in water rights and hence demand regimes (sovereign, adjudicated, permitted/dedicated, unadjudicated), (i) existence of already existing deficit, if any, and (j) conditions upstream and downstream of each region, including those within the same compact basin.

**Demographic Data** – In addition, the Common Technical Platform does not account for variations in demographic conditions across regions. For example, in the previous round of regional water planning, the Northwest New Mexico plan incorporated projections of tribal populations that differed from county-wide projections prepared by the Bureau of Business and Economic Research. Tribal populations may be affected differently by economic conditions and may have goals of having members return to their homelands. The current round of water planning, constrained by time, resources, and participation, does not allow tribal or other population variations to be addressed.

Climate Disruptions - Regions are already experiencing more extreme climate disruptions and are being forced to find solutions. The Common Technical Platform does not address the variability with the Severe Drought Impacted Administrative Water Supply ("based on the ratio of the minimum drought of record to the 2010 administrative water supply") Regions are not experiencing a static point.

- Climate assessments predict significant reductions in surface water supply below 2010.
- Even without climate change, records show frequent occurrences of multi-decadal drought.
- Planning must deal with great year-to-year variability in available surface water.

 Planning should acknowledge the likelihood of frequent intense events – storms, droughts, wildfires

With the historical data now being a less than credible image of possible future resources, the regions need data, tools and projects that demonstrate the need for resiliency and help to build it.

#### **Successful Examples**

**Technical Committees** - During the first cycle of regional water planning, several regions created "Technical Committees". To the extent available, the committees included experts representing various disciplines and viewpoints (hydrology, law, biology, planning, utilities, agriculture, etc.). These committees made varying contributions to their respective regions' planning, but all helped the regions to establish a bio-physical and demographic ground truth upon which the water planning decisions could be made. They allowed stakeholders to have and express their own opinions, but not work from their own facts. Local knowledge imbued the process with a level of trust and ensured that the product was relevant to the region, both of which made acceptance more widespread.

In a comparison of water planning done several years ago, the ISC found that many western states "allow technical studies and communication among stakeholders to occur at a more meaningful, local level."

Climate Change Handbooks – California's Climate Change Handbook for Regional Water Planning, and the Colorado Climate Plan provide a framework for considering climate change in water management planning. Key considerations, resources, tools, and options are presented that will guide resource managers and planners as they develop means of adapting their programs to a changing climate. The handbook uses the Department of Water Resources' Integrated Regional Water Management planning framework as a model into which analysis of climate change impacts and planning for adaptation and mitigation can be integrated.

#### Recommendations

**Technical Committees** – To address the need for credible, comparable, and meaningful data we recommend that the State allow, encourage, and fund the regions to establish technical committees of local experts to the extent practicable, for the purpose of developing a credible regional set of data for the region.

**Common Technical Platform -** We also recommend that the state build on the concept of a "Common Technical Platform" to allow comparison among regions, adding to it to reflect the sometimes vast differences among regions' environmental and human attributes. Commonalities among regions' data should be based on a wider range of parameters that can reflect the regional attributes, allowing supply and demand for the more complex regions to be well described, while

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<sup>&</sup>lt;sup>1</sup> ISC's Overview of Water Planning in Western States, February 2009, http://www.ose.state.nm.us/Planning/SWP/PDF/WesternStatesWaterPlanningOverview-2009-02.pdf

<sup>&</sup>lt;sup>2</sup> California Department of Water Resources, 11/11, http://www.water.ca.gov/climatechange/CCHandbook.cfm.

<sup>&</sup>lt;sup>3</sup> The 2015 Colorado Climate Plan, http://cwcb.state.co.us/environment/climate-change/Pages/main.aspx.

less complicated situations could report "not applicable" or "still to be measured" where appropriate. At a minimum, the following common parameters should be defined and established on a statewide basis, to apply for all regional water plans:

- Identification and definition of reporting methods
- Requirement to address each demand type (depletions and withdrawals, M&I, ag, riparian, mining, etc.).
- Definition of each sector of use (M&I, ag, riparian, mining etc.).
- Requirement to be compatible with (or deliberately different from) NMSU's Statewide Water Assessment
- Requirement for incorporation of groundwater impacts.
- Time frame for historical basis data
- Time frame or horizon for the cycle of planning
- Definitions of key water planning related words and phrases
- Annual scaling of future water availability (or other means) to account adequately for climate change.
- Definition(s) of supply/demand "gap" (e.g., renewable supply minus depletions or withdrawals minus water rights, etc.).
- Definitions of data components to describe water availability and demand for accounting (paper water components, wet water components, dedicated rights components, permitting components, stream flow components, rainfall components, pumping components, etc.) and when/how to aggregate components.
- Demand projection methodologies how to project demands upon available water (population estimates, conservation estimates, economic expansion estimates, specific knowledge corrections, uncertainty reporting, etc.)

Subject to these commonalities, the technical committees, where available, should interpret the hydrological attributes for their regions. The regions without such technical committees could seek assistance from a state university or defer to the expertise of the OSE/ISC.

To further improve water planning and administration, the state (and/or adjacent regions) should establish formal mechanisms to (a) account for groundwater and surface water flows between adjacent regions (i.e., pseudo-compacts) and (b) plan for adequately coordinated inter-basin and inter-region transfers of water.

Climate Change – We recommend that the State work with the regions to develop a New Mexico framework for considering climate change in water planning. Key considerations, resources, tools, and options should be included, to guide resource managers and planners as they adapt their programs to a changing climate. The framework should encourage chapters on climate change impact assessment, planning, and coordination in regional and state water plans.

### Water Rights Adjudication DRAFT

The process of water planning is ultimately a discussion regarding various management strategies for given scenarios. The overarching assumption is that there will be increasing demand constrained by static or decreasing resource availability. This results in a state of tension across stakeholders and entities that ideally would be reduced through water planning. However, the failure to ascertain quantity and quality of water rights prevents water planning from achieving this goal.

#### **Baseline facts**

- NM Constitution, Article XVI, Sec. 2. [Appropriation of water.] The *unappropriated* water of every natural stream, perennial or torrential, within the state of New Mexico, is hereby declared to belong to the public and to be subject to appropriation for beneficial use, in accordance with the laws of the state. *Priority of appropriation shall give the better right*. [emphasis added]
- The Treaty of Guadalupe Hidalgo establishes protections to pre-1848 water rights: Treaty of Peace, Friendship, Limits, and Settlement Between the United States of America and the United Mexican States Concluded at Guadalupe Hidalgo, February 2, 1848, Article VIII: ... In the said territories, property of every kind, now belonging to Mexicans not established there, shall be inviolably respected. The present owners, the heirs of these, and all Mexicans who may hereafter acquire said property by contract, shall enjoy with respect to it guarantees equally ample as if the same belonged to citizens of the United States.
- The Office of State Engineer considers the Rio Grande (and likely other surface waters) to have been fully appropriated since at least 1907.
- The vast majority of senior (pre-1907) rights are agriculturally based.

#### **Water Planning Assumptions**

Regional water planning processes have failed to effectively analyze and incorporate water rights. To a large extent, this is a problem of governance in regional water planning processes. In the past, the ISC has noted that resident participation tended to be higher in rural areas because those people generally feel more threatened by water planning as a reallocation of their property rights. Now, in the update process, participation in the water planning update process has been heavily weighted toward governmental entities and organizations that represent urban populations.

This emphasis on urban regions has led to assumptions about growth in demand and the availability of water from the agricultural sector, as agriculture is frequently referenced as using 80% of the water statewide. Nowhere is it acknowledged that this agricultural water is owned by people and used to produce food for people. Nor is the regional variation in that percentage acknowledged, or the very real limitations on surface water availability that constrains much of the agricultural sector. Additionally, the many indirect values of the use of that agricultural water are not quantified in monetary terms. Water planning has been approached in economic terms rather than hydrologic terms overall, with the planning for reallocation to "higher" monetary value uses of water. This is reflected in

various documents describing particular land development projects, and the emphasis on specific projects in the current round of regional water planning by the ISC.

#### **Impacts**

The failure to effectively incorporate water rights limits the validity of planning, and ultimately the range of options available for management of the state's limited water supplies.

- While transfers do occur under the OSE review process, these are subject to invalidation by a judicial process. This method of review is piecemeal, and places the burden of proof on the individual, thus limiting application. For environmental purposes, including compliance with the Endangered Species Act (ESA), the lack of adjudication limits the ability of the federal entities to engage "forbearance" programs. The Bureau of Reclamation, as the entity responsible for providing water for ESA compliance, can and does lease water for environmental flows. Former Area Manager Connie Rupp was succinct in her description of the government's stance: the federal government cannot acquire property that does not have clear title. There is definitely interest in leasing directly from rights holders, but without adjudication that cannot be done.
- Without adjudication there is no quantification of valid water rights, or no baseline Without adjudication, there is no quantification of available supply, so there is no way to actually balance supply and demand. This has special meaning when considered along with the quantification of pueblo rights. Until there is some adjudication or settlement of pueblo rights, the future availability of state water currently used is uncertain. Setting the uncertainly of the tribal rights aside, without adjudication, there is no way to actually balance permitting with the water actually available. An example is the fact that in the MRG, permits for groundwater pumping would require more water than can be offset by drying nearly all irrigated lands from Cochiti to Elephant Butte. Without adjudication, lands with ancient rights are difficult to protect from uncompensated takings, which frequently take place as groundwater depletions affect available supply. In the Albuquerque area alone, that depletion number is about 60,000 af/yr of induced seepage from ditches. That 60,000 af/yr would be a huge boon to farmers and the ecosystem alike.
- Adjudication provides accountability
  - Without adjudication, there is great resistance to metering and measuring because of the risk of diminishing property rights. Additionally, the incentive of being able to assure a full delivery by metering is absent when there is no established quantity of right to water. Frequently water is delivered on a parity basis without regard for priority or quantity of right. This also means that in water short years, those with senior rights are curtailed at times that might not have been necessary under priority delivery. This also removes the ability for senior rights holders to lease to other agricultural water users. While many water plans call for low water use crops, not only do these ignore the fact that farmers grow what they can sell, but without adjudication the often higher value, high water use crops carry no penalty for consumption beyond a water right. Absent adjudication, there is no accounting for riparian and other uses of water that fall outside the permit system but are included in the total water consumption of the river basin. Accountability would be also be of benefit for water currently delivered to stream flow for federal purposes without any compensation to the owners of those water rights. An example is that when the ABCWUA provides water for federal purposes, the utility is compensated. When

MRGCD changes operation to provide water for those same federal purposes, there is no compensation despite the fact that these changes have a detrimental impact on farms. Because there is no accounting for ownership of these waters, the state is losing the economic benefit of federal dollars compensating rights owners.

- Planning without adjudication will/has led to conflicts
   Urban plans are based on the use of water rights currently owned by people who may be unaware that their water rights have already been allocated to a different use. When and if these plans come to fruition, people will protect their rights, through litigation, legislation, or whatever methods are available. Should water rights be quantified through administration rather than adjudication, constitutional issues will surely continue to arise.
- Impact of non-action affects us all

  Further, should the promises already made be fulfilled, the impacts to the rest of us will be
  enormous. The loss of irrigated farmland means the loss of food security, groundwater
  recharge, habitat, greenbelt, view-shed, air quality enhancements and future choices, and will
  have a huge negative impact on us all -- our quality of life, our health and the state our children
  and grandchildren inherit. Often, the greatest value in land is in its potential. In NM, land
  without water is worthless, not useful for helping us to adapt to changing climate and changing
  priorities.

#### Recommendations

In order to ensure valid data and meaningful management options for regional water planning, adjudication must move forward. The following recommendations address adjudication.

• Explore alternative agencies for adjudications

One example is the MRGCD. In the Conservancy Act, MRGCD has the authority to conduct a judicial process for quantifying the rights of lands to which it delivers waters. The MRGCD is the source of documents the OSE depends upon for transfers of water rights. The 2003 State Water Plan called for a schedule of adjudications, and the MRG was not included even in the ten year plan. While this is not statewide, the failure to adjudicate the basin in the most populous area puts the State's economy at risk.

- Explore removing the OSE to expert status only in adjudications.
  - While the OSE houses attorneys doing the legal work for the state, it is also the technical expert and, under the new AWRM regulations, it is acting in a judicial capacity in determining water rights in times of shortage where court adjudications have not been completed. There is certainly significant discomfort around the state with the conflicts inherent in one agency fulfilling all roles.
- Make adjudications a legislative priority, with restructuring the process so the "easy" claimants are handled first.

There is at least a perception that adjudications are not handled by the OSE in a manner that is most efficient and economical because of the institutional support of administrative allocation rather than adjudication. Given that 2016 is a short session, support a memorial which focuses on completing adjudications.

• Respect and enforce prior appropriation doctrine, rather than avoiding it administratively.

Each time adjudication comes up, there are statements about how it is too complicated, it would be different if we'd done it 20 years ago. . . We are 20 years ago from future generations wishing we'd done better to follow the constitution and treaty. We seem to be in a water demand pause, with population decreasing. This is the very time to fully engage in better water administration -- including adjudication and priority administration. Texas began their process fairly recently, and has made great strides in bringing junior users, including municipalities, into compliance with priority administration. Their pursuit of adjudication and New Mexico's failure to adjudicate has become a point in interstate litigation. Without adjudication, New Mexico's water cannot be fully protected.