

# ROARING FORK WATERSHED PLAN

*Sponsor: Ruedi Water & Power Authority  
Lead Consultant: Roaring Fork Conservancy*

## PHASE II GUIDANCE DOCUMENT

*Illuminating the Way Ahead*



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## Executive Summary

These are challenging times for local governments as they face declining tax revenues, budget cutbacks, aging infrastructure, and growing service demands. In the midst of these difficult circumstances, local governments are also suddenly responsible for long-term, statewide water management planning. At a time when the decisions being made with respect to Colorado’s scarce water resources really matter, local governments have a significant opportunity to protect the resources of the Roaring Fork Watershed.

Colorado is facing unprecedented growth – with the state’s population projected to potentially double by 2050. To meet the needs of an additional 3.9 to 5.5 million people, Colorado needs to develop between 320,000 and 1.1 million acre-feet of additional water supplies (*see* Figure A). For local interests within the Roaring Fork Watershed, the projected statewide water demands have clear implications: increased potential for additional transmountain diversions to the Front Range, a greater demand for water from a booming West Slope energy industry, and increased in-basin municipal water demands due to local population growth.

Given the complexity and divisiveness of long-term water management planning, the State of Colorado has extended significant responsibility for water planning to local interests, through a process known as the Interbasin Compact Process. This water planning initiative is founded on regional cooperation and negotiation. The Interbasin Compact Committee is currently preparing for state-level negotiations on strategies to meet Colorado’s long-term water demands; transbasin diversions are at the center of these discussions (*see* Figure B).

A unified local voice will be critical to an effective response to both external threats to local water resources and in-basin pressures on the watershed. Local governments must also account for the connection between water resources and their land-use decisions. While some local land-use decisions directly involve water resources (such as the exercise of certain city and county “1041 powers” and those related to House Bill 1141, enacted in 2008), other land-use decisions (like onsite wastewater treatment system permitting) affect water resources indirectly, but in cumulatively significant ways. By coordinating the exercise of their water-related powers, local governments can address not only long-term water management concerns but also other critical issues such as growth control, environmental protection, and economic development.

Outside of land-use regulations and the Interbasin Compact Process, several other important tools for watershed protection exist, like the State’s new instream water lease and loan program, and the ability to create recreational in-channel diversions and conservation easements.

Additionally, state law provides local governments with both the authority and the means to organize and cooperate for water-related purposes. Intergovernmental agreements, intergovernmental entities, and less formal working partnerships could enable our watershed’s relatively small communities to match the powerful water interests on the other side of the Continental Divide – a region that is projected to gain between 3.2 and 4.5

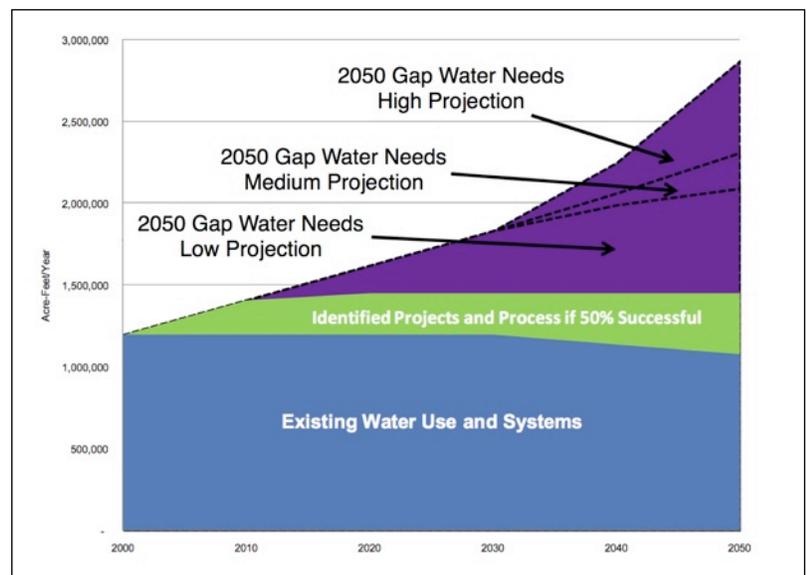


Figure A. State of Colorado projected municipal and industrial water demands, supplies, and 2050 water needs with full implementation of the “Identified Projects and Processes,” as identified in the Statewide Water Supply Initiative (SWSI). (Colo. Water Conserv. Bd.)

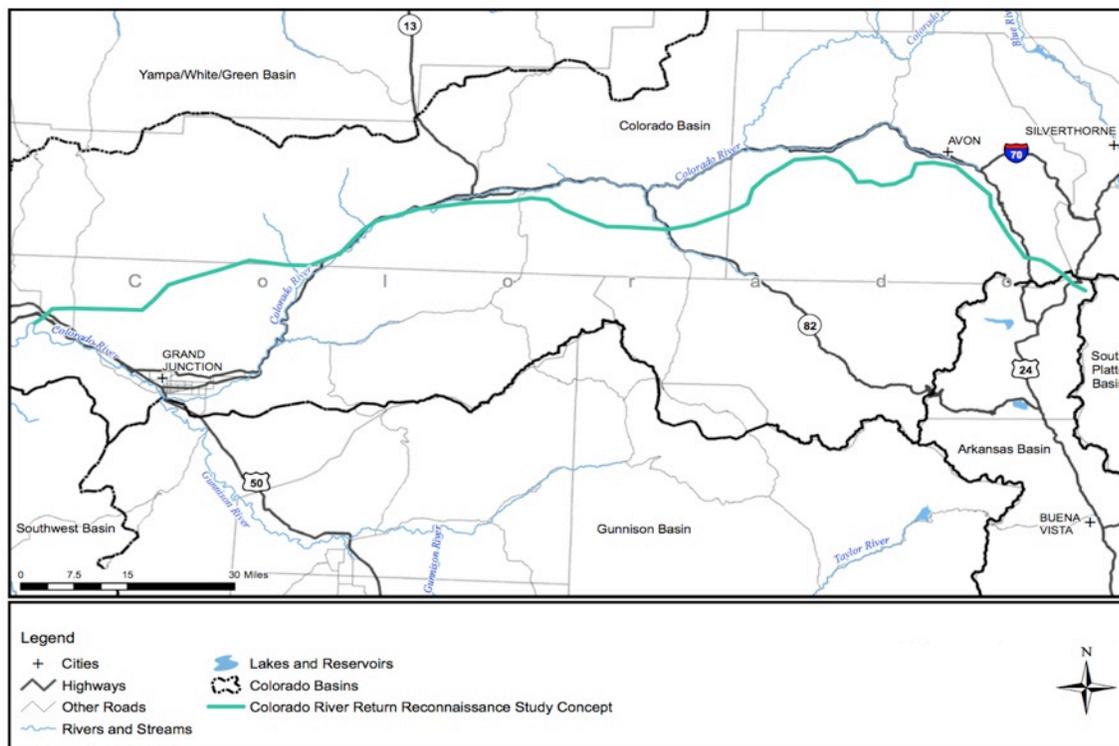


Figure B. Colorado River Return Concept. This proposed project is one of three new major transmountain diversions currently at the center of statewide water negotiations. This project would draw water from the Colorado River at the border with Utah, and pump it to the Front Range with eleven pumping stations. (Colo. Water Conserv. Bd.)

million new residents during the next four decades and plans to develop an additional 1.5 million acre-feet of water supplies in order to meet the needs of this growth.

Institutional barriers, financial challenges, and the technical complexity of water management represent significant obstacles to achieving effective watershed protection. Developing a system of watershed-based protection will require an unprecedented level of cooperation among the various local governments, water management entities, and residents of the Roaring Fork Watershed. As the local component of the Interbasin Compact Process, the Roaring Fork Watershed Plan can serve as the model for such a watershed management regime. By adopting and implementing the objectives and recommended actions generated during Phase II of the Watershed Plan, local governments may begin to translate the local unity of interest into unity of action, thereby ensuring the long-term protection and sustainable development of local water resources (see Figure C, below).

*“By adopting and implementing the objectives and recommended actions generated during Phase II of the Watershed Plan, local governments may begin to translate the local unity of interest into unity of action, thereby ensuring the long-term protection and sustainable development of local water resources.”*

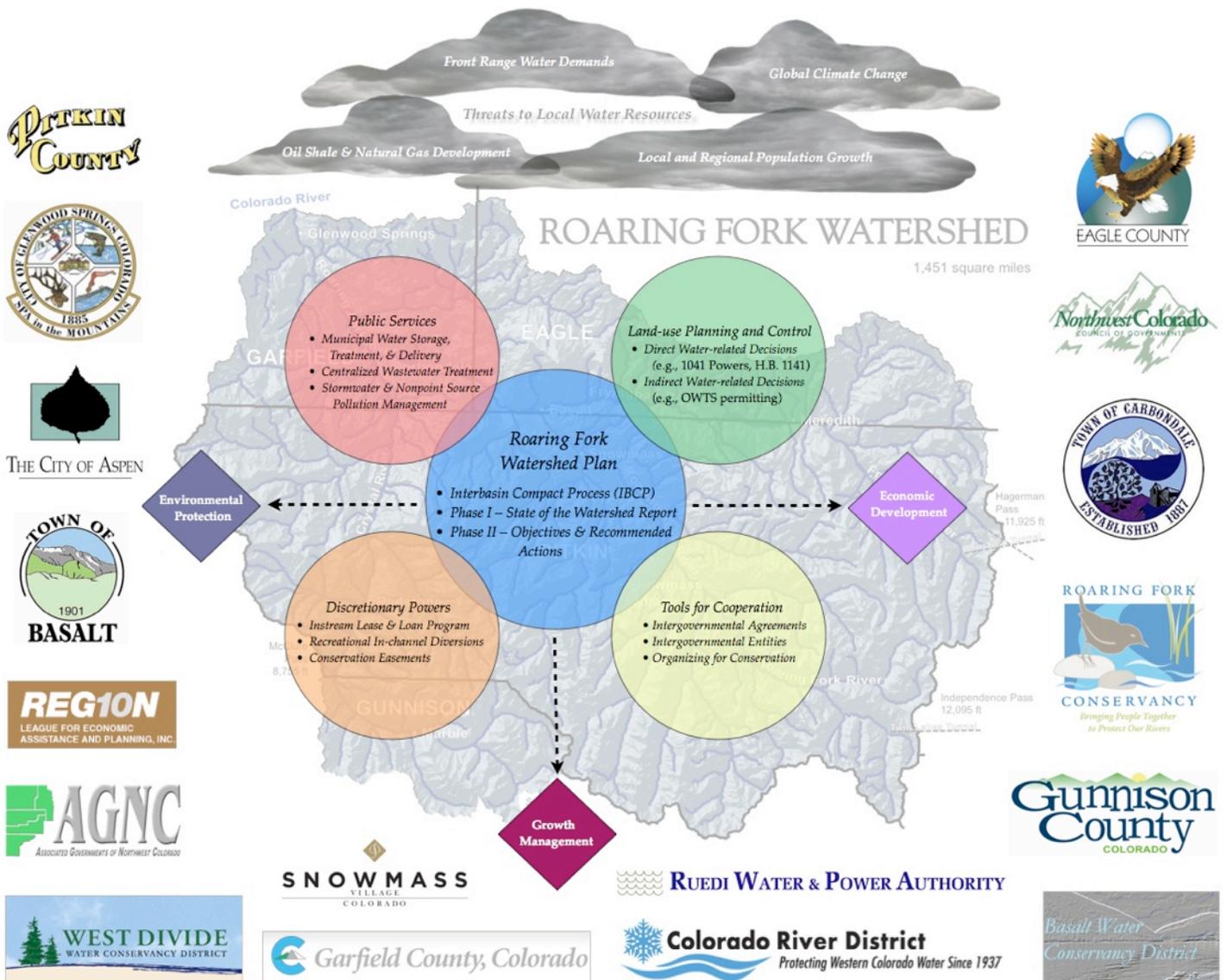


Figure C. The Big Picture. Local governmental entities must work together, through the Roaring Fork Watershed Plan, to ensure the long-term, sustainable development and protection of local water resources. Given the importance of water to the people of Colorado, coordinated and cooperative watershed management is one of the most effective ways local governments can plan for the future of our state and our communities.

## Coordination and Cooperation – Translating Unity of Interest into Unity of Action

Colorado’s water management is at a critical juncture as the state transitions “from an era of developing an undeveloped resource to one where we are managing a fully developed resource.”<sup>1</sup> According to the State’s most recent estimates, Colorado’s population is projected to double by 2050, growing from the current level of around 4.8 million to between 8.7 and 10.3 million people.<sup>2</sup> With the corresponding increase in municipal and industrial water demand associated with this growth, by 2050 the annual statewide water demand could exceed Colorado’s total annual supply by as much as 1.1 million acre-feet of water (see Figure 1).<sup>3</sup>

At the regional level, more than three-quarters of the statewide increase in municipal and industrial water demand is projected to occur in the South Platte and Arkansas basins, primarily because these two areas are projected to gain between 3.2 and 4.5 million additional residents by mid-century.<sup>4</sup> As a result of this new demand, local water providers are scrambling to identify new sources of water. However, even if Front Range water providers successfully complete all the water-supply development projects that are “reasonably expected” to be implemented over the next two decades, the Arkansas and South Platte basins will still face annual water shortages of at least 200,000 acre-feet by 2050.<sup>5</sup>

Colorado has never had a long-term water management plan. In 2005, in the wake of the recent drought and in response to the projections for statewide water demand, the Colorado General Assembly initiated a statewide, long-term water management planning process known as the Interbasin Compact Process (IBCP).<sup>6</sup> In devising the IBCP, the Colorado General Assembly recognized that the state’s historic approach to water allocation is not well-suited to the current challenges facing long-term, statewide water management planning.<sup>7</sup> The IBCP is not intended to supersede, abrogate, or impair Colorado’s system of water allocation, but rather to allow water providers to meet the projected water demands of the twenty-first century.<sup>8</sup> This process is based upon the historical model of interstate river compacts that Western states, including Colorado, have relied upon for solving state conflicts about water development and use for over a century.<sup>9</sup> In order to ensure that the state’s remaining water resources are developed in an efficient and equitable manner, the IBCP institutes a bottom-up, collaborative approach to water resource planning.<sup>10</sup>

The IBCP is structured to facilitate regional negotiations carried out by nine “roundtables” representing each of the state’s major river basins, plus one for the Denver Metro area. Comprised of delegates selected primarily by local governmental entities, the roundtables are authorized to negotiate voluntarily on behalf of the collective water interests within their respective basins, the allocation of Colorado’s remaining water resources.<sup>11</sup> Each roundtable is responsible for conducting a basin-wide assessment of “consumptive and nonconsumptive water needs.”<sup>12</sup> These water-needs assessments are intended to serve as an objective platform from which roundtables can negotiate how Colorado will apportion water in the twenty-first century, among competing interests and in the face of future

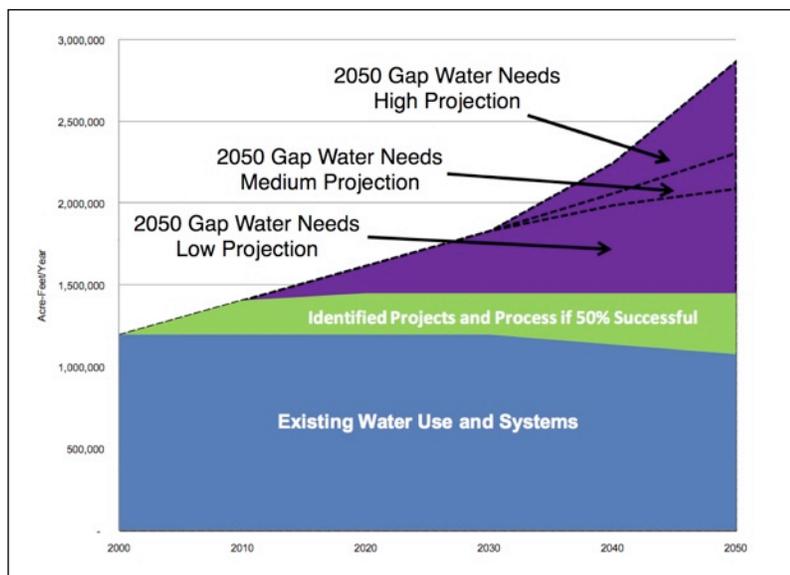


Figure 1. State of Colorado projected municipal and industrial water demands, supplies, and 2050 water needs with full implementation of the “Identified Projects and Processes,” as identified in the Statewide Water Supply Initiative (SWSI). (Colo. Water Conserv. Bd.)

statewide water shortages.<sup>13</sup>

The water-needs assessments provide an opportunity for local interests to identify their future water needs. The Roaring Fork Watershed Plan is funded, in part, by the Colorado Water Conservation Board, with the endorsement of the Colorado River Basin Roundtable. Part of the rationale for that funding is to support the identification of the long-term, nonconsumptive water needs (i.e., recreational and environmental needs) in the Roaring Fork Watershed. The Watershed Plan will therefore help to determine what local water resources, if any, are available to meet Colorado's future water demands. Accordingly, local interests must ensure that Phase II of the Watershed Plan adequately identifies those water resources of particular recreational, environmental, and economic value to local communities, which should be reserved from future water supply development schemes.

While the IBCP is founded on regional cooperation and negotiation, this process is designed to address Colorado's future water shortages. New and expanded transmountain diversion projects are one of the potential responses to those shortages.<sup>14</sup> Two proposed projects currently at the center of IBCP discussions would directly impact the Roaring Fork Watershed – one involving a pipeline bisecting the valley through the Four Mile Creek area (see Figure 2), and the other diverting additional water from Lime Creek in the headwaters of the Fryingpan River, an area originally deferred from inclusion in the Fryingpan-Arkansas Project (see Figure 3).<sup>15</sup>

As part of Phase II of the Roaring Fork Watershed Plan, local stakeholders are currently in the process of developing a set of objectives and recommended actions for the long-term protection and enhancement of water resources in the watershed. Local governments must take the critical next step, by ensuring that the Watershed Plan's recommendations are implemented through the coordinated and cooperative exercise of their water-related authority.

*What role will transmountain diversions play in meeting future Front Range water demands? For this report's analysis of this issue, see Appendix I.*

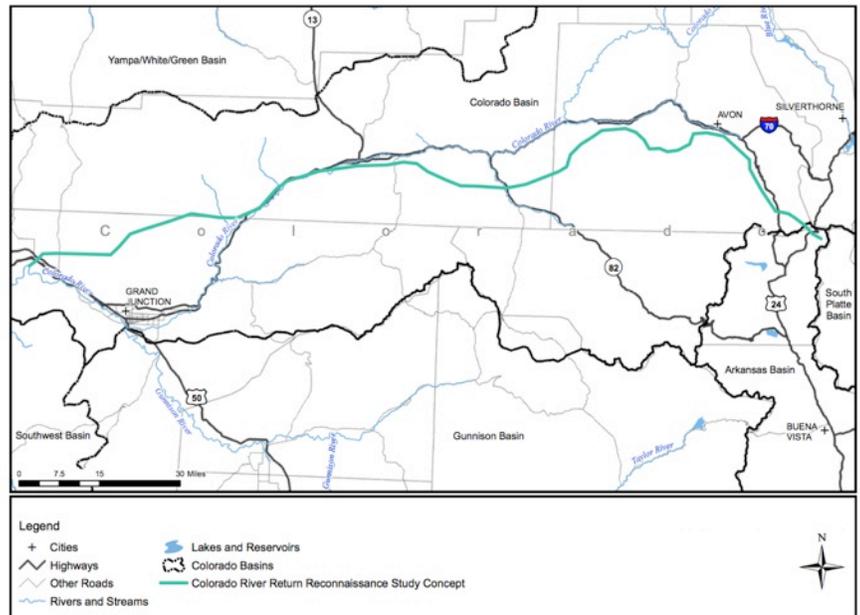


Figure 2. Colorado River Return Concept. This proposed project is one of three new major transmountain diversions currently at the center of statewide water negotiations. This project would draw water from the Colorado River at the border with Utah, and pump it to the Front Range with eleven pumping stations. (Colo. Water Conserv. Bd.)

## The Nexus Between Local Land-Use Planning and Statewide Water Management

Local governments are not only at the forefront of the IBCP, they also have an increasingly important influence on statewide water management through their traditional authority over local land-use planning. During the past three and a half decades, the Colorado General Assembly has approved several measures to improve coordination between local land-use planning and statewide water management. Yet legislative reform is still incomplete, and many types of small-scale, water-related land-use impacts go unaccounted for under current local permitting processes. As Colorado reaches the limits of its developable water supply, these individually small yet



Figure 3. Lime Creek Canyon. One of the proposed “small-to-medium” new supply development strategies currently under discussion among the basin roundtables is the “Ruedi Enhanced Pumpback” concept, which proposes diverting water from the formally “deferred area” on Lime Creek, in the headwaters of the Fryingpan River, to the Front Range, through the Fryingpan-Arkansas Project. According to the State’s recent analysis, “This would be a controversial project from an environmental perspective; however, the yield may be fairly significant since the Roaring Fork River joins the Colorado River below the Shoshone Power Plant call.” (Colo. Water Conserv. Bd., “Draft Report – Strategies for Colorado’s Water Supply Future,” 4-41 (2009))

cumulatively significant impacts, often overlooked during local land-use permitting, may suddenly be critical to statewide and local water management.

The State’s policy is to “provide broad authority to local governments to plan for and regulate the use of land within their respective jurisdictions.”<sup>16</sup> Water management, however, has typically remained an area of exclusive State jurisdiction – the State regulates and administers the use of water resources, in addition to helping plan and finance local water resource development projects.

One reason for the State’s traditional authority over water management is the conventional role of local water managers and providers as free-market actors in the provision of water services – from irrigation districts providing water for farmers in the Grand Valley, to Denver Water providing its customers with “high-quality water and excellent service at the lowest possible price.”<sup>17</sup> In this free-market system, smaller West Slope communities have

historically lost out to Front Range water providers, with transmountain diversion projects as the end result.

However, beginning in 1974 with the passage of House Bill (H.B.) 1041, the State has gradually expanded the power of local governments to address water-related impacts associated with local land-use permitting decisions. With H.B. 1041, West Slope interests also gained a critical tool for protecting local water resources, as demonstrated by the dispute about the Homestake II Project (discussed below). The most recent state legislation following this trend, H.B. 1141 (2008), requires developers and local governments to account properly for the water demands associated with major development projects.

In spite of measures like House Bills 1041 and 1141, the State has yet to recognize the full range of impacts on water resources related to local land-use decisions. The permitting of private septic systems (now more appropriately referred to as “onsite wastewater treatment systems”) is one example of a local land-use permitting process that can have a cumulatively significant impact on water resources, but which is not subject to statewide impact analysis. In addition to water quality concerns, permitting these systems can contribute to reductions in available groundwater and local instream flows.

Local governments in Colorado seek to balance population growth, economic development, and environmental protection. Given the importance of water to the people of Colorado, coordinated and cooperative watershed management is one of the most effective ways local governments can plan for the future of our state and our communities.

### **City & County 1041 Powers – Giving Voice to West Slope Water Interests – The Homestake II Project**

H.B. 1041 was the State’s first attempt to integrate water resource management into local land-use planning. Enacted in 1974 in response to the “rapid growth and development of the state and the resulting demands on its land

resources,” H.B. 1041 authorized counties and municipalities to regulate certain areas and activities within their respective jurisdictions that rise to the level of a “state interest,” given the potential impact on the people of the state as a whole.<sup>18</sup>

H.B. 1041 identifies several general types of areas and activities that may affect state interests.<sup>19</sup> Local governments must first designate specific areas and activities within their respective jurisdictions that fall within those general categories, based on the “intensity of current and foreseeable development pressures.”<sup>20</sup> Once such a designation is made, local governments can then establish specific regulations, based on general statutory criteria, governing any development project affecting or involving the particular area or activity.<sup>21</sup> Thereafter, any such development proposal is subject to city and county review and must comply with the local regulations.<sup>22</sup> If the local government determines that a proposed development does not meet its established regulations, it may deny the necessary 1041 permit and prevent the project from proceeding.<sup>23</sup>

H.B. 1041 identifies several areas and activities of state interest that pertain to water resource management (see Figure 4). For example, any project involving the construction of new, or the expansion of existing, major water and sewage treatment systems qualifies as an activity of state interest, allowing counties and municipalities to review the site selection and construction plans of any such project within their jurisdiction.<sup>24</sup> More generally, the “efficient utilization” of municipal and industrial water projects likewise qualifies as an activity of state interest. The statutory criteria for local regulation of these two activities are equally broad, emphasizing only the orderly and sustainable development of available water resources.<sup>25</sup>

While Colorado water law provides no basin-of-origin protection universally applicable to transmountain diversion projects, H.B. 1041 has proven to be an effective tool for local governments on the West Slope seeking to protect native water resources.<sup>26</sup> Perhaps the most notable example of local “1041 powers” being used to defeat a major water supply project occurred in the late 1980s, when the Eagle County Board of County Commissioners denied special permits sought by the cities of Aurora and Colorado Springs for the extension of a major transmountain diversion project in the newly designated Holy Cross Wilderness area.<sup>27</sup>

Proposed as the “Homestake II Project,” the project would have diverted approximately 30,000 acre-feet of water annually from Cross and Fall creeks in southeastern Eagle County.<sup>28</sup> Colorado Springs and Aurora had even gone so far as to get the project exempted from the federal designation for the Holy Cross Wilderness.<sup>29</sup> However, based on regulations adopted pursuant to H.B. 1041, the Eagle County Board of County Commissioners ruled that the proposed project and the potential water diversions would disturb wetland habitat and constitute a public nuisance by degrading scenic and recreational values.<sup>30</sup>

Aurora and Colorado Springs challenged Eagle County’s regulations in court, arguing that they exceeded H.B. 1041’s general criteria governing local regulations on the extension of major water supply systems and the development of municipal water projects.<sup>31</sup> On review, the Colorado Court of Appeals denied the cities’ claims, holding that counties and municipalities have the

Areas of State Interest	Criteria for Administration
Floodplains as natural hazard areas	Administered so as to minimize significant hazards to public health and safety or property.
Shorelands of publicly owned reservoirs	Administered in a manner that will “allow man to function in harmony with rather than destructive to, these resources.”
Significant wildlife habitats containing endangered wildlife species	Administered in a manner that will “allow man to function in harmony with rather than destructive to, these resources.”
Activities of State Interest	Criteria for Administration
Site selection and construction of major new domestic water and sewage treatment systems	Constructed in areas which will properly utilize existing treatment plants and the orderly development of water and sewage treatment systems in adjacent communities.
Major extensions of existing domestic water and sewage treatment systems	Permitted in areas where the anticipated growth and development that may occur as a result of the extension can be accommodated within the financial and environmental capacity of the area to sustain such growth.
Efficient utilization of municipal and industrial water projects	Administered in a manner that emphasizes the most efficient use of water, including the recycling and reuse of water.

Figure 4. Areas and activities of state interest under H.B. 1041 related to water resources.

authority to adopt regulations that are “more stringent” than the general statutory criteria, so long as such regulations are rationally related to the criteria.<sup>32</sup> Thus, the court ruled that Eagle County’s regulations pertaining to wetland disturbance and degradation of natural scenic values supported the general statutory criteria of efficient water use and environmental sustainability.<sup>33</sup> This 1994 decision, upheld by both the Colorado Supreme Court and the United States Supreme Court, was a major victory for West Slope communities seeking to limit the impact of transmountain diversions to the Front Range.<sup>34</sup>

While H.B. 1041 provides local governments with regulatory authority over water supply projects within their boundaries, this authority is not unlimited. Local governments can regulate the exercise of water rights, but they may not prevent the exercise of such rights altogether.<sup>35</sup> This rule does not exempt water appropriators with pre-existing water rights from local review, but it may afford a basis for invalidating particular regulations.<sup>36</sup> Local regulations cannot prevent the lawful exercise of existing water rights or constitute an attempt by the local government to effectively veto the project.<sup>37</sup> Developers are free to submit alternate proposals that comply with guidelines and regulations, and local governments must consider them.<sup>38</sup>

The difference between a local government lawfully “regulating” the exercise of a water right and unlawfully “prohibiting” the right from being exercised altogether is a decision for a court to make, based on the circumstances of the case at hand.<sup>39</sup> A court, however, does not have the authority to question whether local regulations are reasonable or whether the cost of such regulations is justified by their benefit.<sup>40</sup> H.B. 1041 represents a delegation of authority by the Colorado General Assembly, and courts will therefore defer to the judgment of local governments in determining what regulations are necessary to meet the general criteria identified in the bill.<sup>41</sup>

As a headwaters area, the Roaring Fork Watershed could be the target of future transmountain diversion projects. While H.B. 1041 does not provide local communities with the authority to prevent transmountain diversions, it does offer a means of “ensuring that their concerns regarding the oftentimes dramatic effects of water exports are addressed through the permitting process.”<sup>42</sup>

All four counties in the watershed – Eagle, Pitkin, Gunnison, and Garfield – have already formally identified certain places and activities within their respective jurisdictions as those of “state interest,” in accordance with H.B. 1041.<sup>43</sup> Furthermore, Eagle, Pitkin, and Gunnison counties are party to a 2006 intergovernmental agreement, which requires the participating governments to “coordinate their review of applications for permits involving water management development activities, where the impacts associated with such activities cross jurisdictional boundaries.” This type of coordinated exercise of local authority is the type of arrangement we should continue to foster to ensure the conservation and sustainable development of local water resources.

### **House Bill 1141 – Coordinating Local Growth Control and Statewide Water Management Planning**

If H.B. 1041 marked the first effort to integrate statewide water management considerations into local land-use permitting decisions, then H.B. 1141, enacted in 2008, represents the most recent effort.<sup>44</sup> H.B. 1141 requires local governments to determine independently, as part of the local land-use review process, that an applicant for a development of fifty or more single-family homes has secured a sufficient water supply for the project (see Figure 5).<sup>45</sup> The law gives local governments wide discretion in determining what constitutes an “adequate” water supply, but nevertheless *requires* local governments to deny any development permit for which the applicant fails to demonstrate a sufficient water supply.<sup>46</sup> Local governments have had the authority to require such information from developers for more than three decades, but H.B. 1141 now makes local governments responsible for verifying the adequacy of a project’s water supply.<sup>47</sup>



Figure 5. Stott's Mill Project in Basalt. Conceptual view of the 110-unit affordable housing project proposed to be built by MSP 1 Development Group on roughly 18 acres south of Basalt. In January of 2010, the project received final approval from the Basalt Town Council. The project was subject to the requirements of H.B. 1141. (A4 Architects, LLC)

H.B. 1141 represented nearly two decades worth of negotiation between statewide water interests, with much of the controversy stemming from the fact that the bill not only linked concerns about population growth to the state's limited water supplies, but also implicated the long-running controversy between West Slope and Front Range water interests.<sup>48</sup> In the end, however, practical considerations prevailed. According to State Representative Kathleen Curry, one of the sponsors of H.B. 1141, "A lot of the impetus behind the bill was just to make sure that water utilities are coordinating with the land use authority before subdivisions are approved."<sup>49</sup> For Representative Curry, the bill also represented an important and long-overdue policy statement. "It's time the State of Colorado acknowledges the limits of our water supply and plans accordingly," Representative Curry said of H.B. 1141.<sup>50</sup> "You can't separate the growth and land use issues from water demand."<sup>51</sup> Accordingly, H.B. 1141 declares that ensuring a sufficient water supply for major development projects is a matter of statewide concern, "necessary for the preservation of public health, safety, and welfare and the environment of Colorado."<sup>52</sup> The bill marks an important ideological step in Colorado's efforts to better coordinate local land-use permitting decisions with statewide water resource planning.

### **Cumulative Impacts – Septic Systems, Exempt Wells, and Aquifer Recharge Considerations**

There are many local land-use permitting decisions that impact water resources, which the State has not yet addressed with specific legislation. Regulation of onsite wastewater treatment systems (OWTS) is one example.

In Colorado, all local boards of health are responsible for developing rules and regulations applicable to OWTS within their respective jurisdictions. These may then be enforced by a local health agency, such as a municipal or county environmental health department.<sup>53</sup> Local rules and regulations must comply with state guidelines and statutory minimum standards for the performance and use of all onsite wastewater treatment systems.<sup>54</sup> The problem with the state standards and guidelines is that they were developed with a focus on the water *quality* impacts associated with such systems.<sup>55</sup> Also important are the cumulative water *quantity* impacts related to the installation and use of such systems.

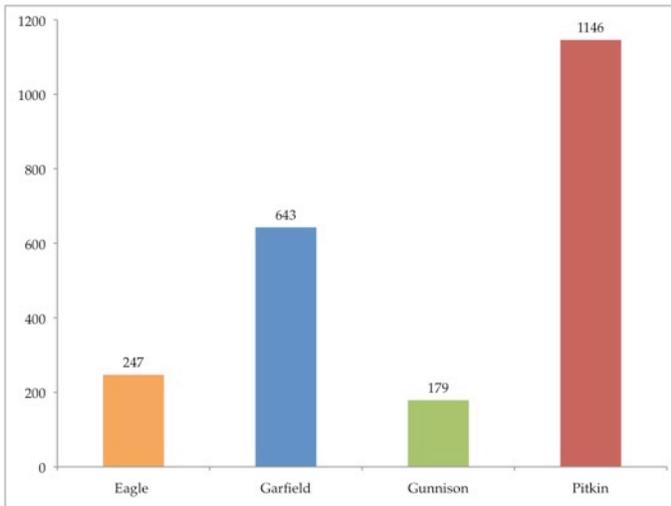


Figure 5. Exempt wells constructed in each of the four counties in the Roaring Fork Watershed between June 1, 1972 and November 19, 2009. (State Engineers Office, “WellView” database)

To understand how OWTS impact water quantity it is necessary to consider how these systems are typically used. Approximately one-fourth of the state’s population is served by OWTS rather than by centralized wastewater treatment.<sup>56</sup> In total, Colorado has more than 600,000 OWTS in Colorado today, with between 7,000 and 10,000 new systems installed each year.<sup>57</sup> These systems are usually built in rural, unincorporated county areas, are often used in conjunction with private wells, and collectively represent a significant portion of the state’s recent population growth.<sup>58</sup>

While the permitting for OWTS most frequently falls to local governments, the use of groundwater resources, through the drilling and

operation of a well, remains in the jurisdiction of the Colorado Department of Water Resources (commonly referred to as the State Engineers Office).<sup>59</sup> Under a 1971 state law, groundwater withdrawals associated with certain types of small-capacity wells used primarily for domestic purposes can qualify for a well permit without any associated water right (i.e., the well is exempt from water rights administration).<sup>60</sup> These “exempt wells” are generally limited to a rate of production of 15 gallons per minute (approximately 0.40 acre foot per year), and their permits usually require that the groundwater be returned to the local aquifer through some kind of non-evaporative septic and/or leachfield system.<sup>61</sup>

What other State governmental entities are involved in water management? See Appendix II for more information on the various State committees, commissions, agencies, and authorities with water-related powers.

The problem with this dual permitting system for OWTS and exempt wells is that it fails to account for the water *quantity* demands associated with a large portion of the development in Colorado’s rural, unincorporated county areas. The State is exempting certain wells from water rights administration under the assumption that these types of groundwater withdrawals have no legally recognized impact on other water users.<sup>62</sup> Yet the water quantity impacts associated with the combined use of OWTS and exempt groundwater wells, though individually small, can be cumulatively significant.

Since 1972, the State Engineers Office has been permitting exempt wells based on the assumption that only a small portion of the extracted groundwater is actually “consumed” (typically thought to be around ten percent), given that the water must be returned to the local aquifer through private OWTS.<sup>63</sup> However, several problems come with this assumption, such as the fact that it is based on the basic model of one well serving one single-family dwelling, with one accompanying OWTS. In actuality, one exempt well can potentially serve up to three single-family dwellings, each with separate OWTS – thereby increasing the opportunity for water loss. Recent research also suggests that even under the basic model of one well and one accompanying OWTS, the amount of water consumed can far exceed ten percent.<sup>64</sup> Since June 1, 1972 (the day that exemptions went into effect) the State Engineers Office has issued approximately 2,200 exempt permits for wells in the Roaring Fork Watershed that were ultimately completed (see Figures 5 and 6).

With the State not accounting for the water use associated with most domestic groundwater wells (the State Engineers Office estimates roughly 70 percent of all well permits it issues are exempt), and local governments issuing permits under outdated state guidelines and standards, the water demands of a large portion of Colorado’s recent growth have gone largely unaccounted for.<sup>65</sup> Yet as the roundtables conduct their in-basin consumptive needs

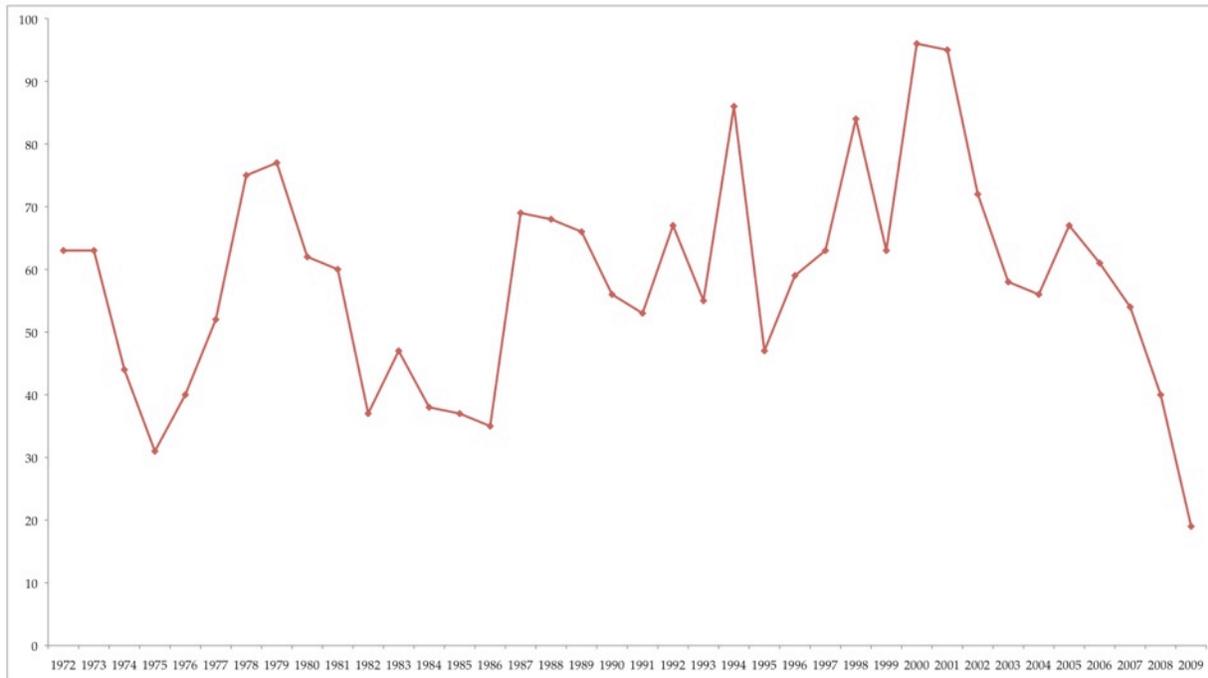


Figure 6. Exempt wells constructed in the Roaring Fork Watershed between June 1, 1972 and November 19, 2009. (State Engineers Office, “WellView” database)

assessments, the cumulative impacts of OWTS and exempt wells suddenly has become of real importance to statewide water planning. If the actual amount of water consumed by these combined systems turns out to be greater than previously assumed, then the proliferation of such systems across the state may mean tens of thousands of acre-feet of less water in Colorado’s legally developable water supply.

Although local governments have no specific authority over the use of groundwater resources, they are the primary permitting authority for OWTS. Thus, local governments have some ability to limit and mitigate the water quantity impacts associated with rural development. The state guidelines and standards represent only the minimum criteria for local regulation of OWTS.<sup>66</sup> As with the criteria enumerated in H.B. 1041, local governments can go beyond these general statutory directives. For example, additional requirements could be imposed on the types of acceptable OWTS, including efficiency requirements for the related plumbing and toiletry fixtures.<sup>67</sup> Local regulations are allowed to restrict individual well users because of the cumulative impacts from adjacent OWTS.<sup>68</sup> Local government may even impose an outright ban on the use of such systems in a defined area, if their use constitutes a hazard to public health or water quality.<sup>69</sup>

More general authority, outside specific OWTS regulations, can be used by local governments to address the water quantity impacts associated with OWTS and exempt wells. The Local Government Land Use Control Enabling Act is intended to give “broad authority to local governments to plan for and regulate the use of land within their respective jurisdictions.”<sup>70</sup> Under this 1974 legislation, local governments can exercise this authority in order to, among other objectives, “provide planned and orderly use of land and protection of the environment.”<sup>71</sup> Though this law lacks specific procedural powers, subsequent legislation has provided local governments with the authority to impose impact fees and exactions on development, adopt building codes, and regulate the subdivision of land.<sup>72</sup>

The proliferation of exempt wells and OWTS is just one of the many types of individually small, yet cumulatively significant, impacts associated with local land-use decisions. These impacts, long overlooked, must be accounted for.

*What else “slips through the cracks”?* Many types of land-use permitting decisions impact local water resources, in addition to OWTS permitting. See **Appendix III** for more information on the following other examples:

- Nonexempt Wells and Augmentation Plans
- Well Permit Conditions
- Stormwater and Nonpoint Pollution Control
- Due Diligence Requirements

As one water expert described the situation, “It is only when you reach the margins of any developed resource that the small individual impacts aggregate to reach a critical mass – the death by a thousand cuts.”<sup>73</sup>

## *New Tools for Local Governments*

In Colorado, local governments and special districts provide the water and sewer services, public safety, and infrastructure that allows local communities to thrive in the state’s arid landscape.<sup>74</sup> Beyond conventional county and municipal governments, Colorado has also authorized more than seventy different types of quasi-municipal government entities, many of which are authorized to provide some type of water-related public services.

*What types of local governmental entities have water-related authority? See Appendix IV for more information on the twenty-five most important local governmental entities when it comes to the management of Colorado’s water resources.*

The Colorado General Assembly has recently provided local governments with additional powers for protecting the recreational and environmental values of water resources, which normally go unaccounted for in Colorado’s free market system of water distribution. The Colorado General Assembly’s actions are the result of the unprecedented challenges of water management in the twenty-first century, which have been highlighted by drought, the threat of climate change, and ever-increasing municipal water demand. Leases and loans for instream flow purposes, recreational in-channel diversions, and conservation easements represent new tools for local governments in ensuring the long-term sustainable development of local and state water resources.

### **CWCB’s Instream Flow Lease & Loan Program**

The 2002 drought dried up streams throughout the Rocky Mountains and caused a crisis among water providers throughout the West. Among the many lessons for Colorado from the 2002 drought was the need for better legal protection for instream flows, particularly during times of severe drought.<sup>75</sup> Local interests were particularly frustrated with the limitations placed upon Colorado’s instream flow program, whereby only the Colorado Water Conservation Board (CWCB) can lawfully obtain water rights for instream flow purposes, although such flows often provided valuable recreational, environmental, and economic benefits to local communities.<sup>76</sup>

The primary manner by which the CWCB has traditionally obtained water rights for instream flow purposes is by applying for and obtaining new water right decrees in water court for stream reaches where unappropriated water still remains.<sup>77</sup> Through this means, the instream flow program has come to be comprised largely of water rights with decrees later than 1973, which are relatively junior in priority.<sup>78</sup> As the 2002 drought demonstrated, these junior rights may not provide adequate instream flow protection during times of shortage.

Given the limited protections offered by new instream flow appropriations, the Colorado General Assembly has also authorized the CWCB to acquire, “by grant, purchase, donation, bequest, devise, lease, exchange, or other contractual agreement,” water rights being used for other purposes, and then to transfer the rights to the state instream flow program.<sup>79</sup> This ability to purchase, lease, and receive loans of instream flow rights is the only means for the CWCB to obtain water rights for instream flow purposes in over-appropriated streams, and it can yield senior water rights that will remain in priority even during a drought (see Figure 7). Despite these benefits, the CWCB had completed only fourteen transactions for the acquisition of senior water rights prior to 2002, covering only eleven lakes and streams statewide.<sup>80</sup> During the 2002 drought it was apparent that several legal and practical barriers effectively prevented such transactions from occurring.<sup>81</sup> Addressing this problem has proven to be a slow and deliberate legislative process, requiring five major amendments to the state’s instream flow laws, but the ultimate result is a potentially far more effective instream flow lease and loan program.

In 2002, the Colorado General Assembly enacted H.B. 156, which in part authorized the CWCB to use acquired senior water rights not just preserve, but also to *improve*, the natural environment to a reasonable degree.<sup>82</sup> Prior to House Bill 156, the CWCB could hold water rights for “only the minimum amount of water necessary for the preservation of the environment.”<sup>83</sup> Now, the CWCB can acquire water rights in addition to those necessary to meet the minimum instream flow recommendations.<sup>84</sup> The CWCB has used this authority to adopt the practice of “stacking,” whereby the Board “combine[s] or stack[s]” an acquired water right with other instream flow rights in order to preserve or improve the natural environment to a reasonable degree.<sup>85</sup> Under this practice, the CWCB can dedicate multiple water rights to instream flow purposes for a particular stream reach, including rights with varying priority dates, as well as rights intended to serve fundamentally different purposes – some rights intended to preserve the natural environment, some rights intended to improve it.<sup>86</sup>



Figure 7. Castle Creek. A 1998 intergovernmental agreement between the City of Aspen and the CWCB governs the city’s use of its domestic water rights on Castle Creek, thereby ensuring that the recommended minimum instream flow (12 cfs) is fully met, including, if necessary, potential bypasses of the city’s senior water rights.

H.B. 156 was also intended to give water users the opportunity to help preserve and improve the local environment with their own water rights.<sup>87</sup> The next three legislative amendments to the instream flow program expanded on this concept of water right “donations” by providing water right owners with the legal means to temporarily loan their water rights to the CWCB for instream flow purposes.<sup>88</sup> So that such loans can be made during a sudden drought, these loans do not require any water court change proceeding, but instead are subject to an expedited review by the state and division engineers.<sup>89</sup> The loans are restricted to 120 days in any one year, and three out of every ten years.<sup>90</sup> In addition, they can only be used on a stream where the CWCB currently holds an existing instream flow right, and only up to the right’s decreed amount.<sup>91</sup> The owner does not risk abandonment of the loaned right, nor will the period of nonuse during the loan be considered in any historical consumptive use analysis when the owner attempts to change or sell the water right in water court.<sup>92</sup>

In 2008, with the enactment of H.B. 1280, the Colorado General Assembly provided similar protections for water users that lease their water rights to the CWCB for instream flow purposes.<sup>93</sup> Water right owners who contract with the CWCB for the use of their water rights will not risk abandonment, nor will the nonuse of the right be considered in any historical consumptive-use analysis.<sup>94</sup> The bill also added an important incentive for water right owners who agree to lease or loan their water rights to the CWCB, through an exception to Colorado’s traditional “one-use” rule, which limits water right owners to only one use of their water rights, with the return flow available to other downstream users. Under H.B. 1280, water right owners can lease or loan their rights to the CWCB for instream flow purposes and then subsequently make full beneficial use of the water right downstream of the targeted instream flow reach, as “fully consumable reusable water.”<sup>95</sup> This provision is particularly important to local governments, allowing them to participate in the CWCB’s lease and loan program and still realize the full economic value of publicly-owned water rights (which may be required under State constitutional provisions and specific local ordinances).

H.B. 1280 provides a very appealing solution for local governments

In 2009, the Colorado General Assembly created a similar incentive for private water rights holders, by providing an income tax credit of up to one-half the current use value of a water right permanently donated to the CWCB in order to preserve the environment. (Colo. H.B. 09-1067, 67th Gen. Assembly, 1st Reg. Sess. (Jun. 4, 2009))



Figure 8. Stapleton Brothers Ditch instream flow loan. Highlighted stream reaches represent the sections of Maroon Creek and the Roaring Fork River that will be preserved or improved by the Stapleton Brothers Ditch loan. (Pitkin Co.)

seeking to improve instream flows, particularly those with changing water demands and relatively large water rights portfolios. Through a lease or loan to the CWCB, a local government can utilize its water rights not currently needed for municipal supply, help preserve and improve the local environment, and make full use of the rights downstream. These benefits recently led Pitkin County to be the first entity to contract with the CWCB for the CWCB’s use of the county’s senior water rights on Maroon Creek.

Through a unique trust arrangement, Pitkin County will loan the water right associated with the Stapleton Brothers Ditch to the CWCB for instream flow purposes.<sup>96</sup> The county acquired this 8 cfs irrigation water right with the purchase of the land for the county airport, but the need for irrigation water decreased as the airport expanded.<sup>97</sup> By loaning the Stapleton Brothers Ditch water right to the CWCB, Pitkin County will be able to preserve and improve instream flows in

Maroon Creek and the Roaring Fork River, and still make full use of the water right downstream (see Figure 8).<sup>98</sup> The county is currently in discussions with other interests regarding a potential lease of the Stapleton water right below the Roaring Fork’s confluence with the Fryingpan River.<sup>99</sup>

Another benefit of this trust arrangement allows Pitkin County to add other county-owned water rights to the “trust estate” for use by the CWCB for instream flow purposes.<sup>100</sup> The trust, therefore, sets the framework for additional stream flow protections as conditions and circumstances change (e.g., timing and amount of annual runoffs, additional transmountain diversions, implementation of water conservation measures). For its part, Pitkin County has portrayed this as an economic decision, stating in testimony before the CWCB that the county “relies on recreation and the natural environment for its economic vitality,” and that the trust offers the county a “safe place to park” its water rights, particularly those acquired through its open space program.<sup>101</sup> With local economies becoming increasingly dependent upon instream flows for recreation, tourism, and even real estate purposes, ensuring adequate instream flows is obviously no longer only an “environmental” concern.

Pitkin County’s offer has not escaped controversy. Several parties objected to the trust in the November, 2009 hearing before the CWCB.<sup>102</sup> Yet despite wide-ranging arguments against the agreement, the CWCB approved the trust arrangement unanimously.<sup>103</sup> Pitkin County and the CWCB must now seek a water court decree for the change in use of the water rights and could face continued opposition. However, if the change is ultimately approved, it will mark an historic step for Colorado’s instream flow program.

### Recreational In-channel Diversions

Water-based recreational opportunities represent a particularly important share of the total economic value created by instream flows, not to mention a growing economic asset for local communities in Colorado.<sup>104</sup> The use of recreational in-channel diversions (RICDs) for such purposes is a relatively new legal tool, but one with great significance, particularly given the recent legislative changes in this area.

Since 1969, Colorado law has recognized the “impoundment of water for recreational purposes” as a valid and beneficial use of water, but the meaning of the term “impoundment” was unclear under the original legislation.<sup>105</sup> The confusion stemmed from the fact that a lawful diversion of water in Colorado requires “removing

water from its natural course or location, or controlling water in its natural course or location,” by means of some sort of “structure or device,” and yet the recreational use of water generally entails free-running water.<sup>106</sup> In 1992, the Colorado Supreme Court finally settled the confusion and held that although “controlling water within its natural course” effected a result similar to a water right decreed for instream flow purposes, that similarity did not make recreational diversions invalid.<sup>107</sup> This decision confirmed that the recreational use of instream flows is a valid beneficial use of the state’s water resources, and not in conflict with the state’s prior appropriation doctrine.<sup>108</sup>

In 2001, the General Assembly attempted to clarify and narrow the meaning of “impoundment of water for recreational purposes,” by re-characterizing such appropriations as “recreational in-channel diversions” and strictly limiting the availability of such water rights to counties, municipalities, water districts, water and sanitation districts, water conservation districts, and water conservancy districts (*see* Appendix IV for background information on these types of public entities).<sup>109</sup> RICD water rights are functionally similar to instream flow rights; they allow a local government to appropriate an amount of streamflow for use within the river channel.<sup>110</sup> Unlike instream flow rights, however, RICDs require that the flow be “diverted, captured, controlled, and placed to beneficial use between specific points defined by physical control structures.”<sup>111</sup> Finally, RICD water rights are limited to the minimum amount of stream flow necessary to produce a “reasonable recreational experience.”<sup>112</sup>

Municipalities and local governments have primarily used RICDs to preserve adequate flows for whitewater floating and engineered whitewater kayak parks.<sup>113</sup> Yet the original 2001 legislation did not define “reasonable recreational experience,” and the lack of specificity aroused fear among various water interests that RICDs would limit Colorado’s full-development of its legally entitled water resources.<sup>114</sup> In response, in 2006 the General Assembly passed Senate Bill (S.B.) 37, which specifically limited the “reasonable recreational experience” for RICDs to “nonmotorized boating.”<sup>115</sup> Other recreational activities may be promoted, “but may not serve as evidence of a reasonable recreation experience.”<sup>116</sup> The law is now clear: “nonmotorized boating” is the key when it comes to RICDs.

S.B. 37 also limited the applicability of RICDs to the period from April 1 to Labor Day of each year, “unless the applicant can demonstrate that there will be demand for the reasonable recreation experience on additional days.”<sup>117</sup> In addition, the measure prohibited the owners of certain large RICD water rights, those with a total volume of water that exceeds fifty percent of the average historical volume of water for the stream segment, from placing a call on the river unless the call will produce at least eight-five percent of the decreed flow rate of the RICD.<sup>118</sup>

While certain statutory restrictions limit the applicability and extent of RICDs, these “quasi-instream flow rights” nevertheless provide an effective means for local governments to ensure that stream flows are sufficient to maintain economically important recreational opportunities.<sup>119</sup>

In 1995, the City of Aspen was one of the first municipalities in the state to obtain water rights for recreational purposes under the original “impoundment” legislation.<sup>120</sup> In 2006, the Town of Carbondale formally filed a request with the CWCB for a RICD on the Roaring Fork River, under the procedures established by S.B. 37.<sup>121</sup> The Town of Basalt and the City of Glenwood Springs have also discussed, and are still considering, filing for RICD water rights, including rights for the already-completed Glenwood



Figure 9. Construction of the Glenwood Springs Whitewater Park during the winter of 2007-2008. In the top photo, a coffer dam diverts the flow of the Colorado River as work is completed on the drained riverbed. In the lower photo, construction crews install wave-generating features, which could qualify as “physical control structures” for purposes of a petition for a RICD water right by the City of Glenwood Springs. (Glenwood Springs Whitewater Park)

Springs Whitewater Park (see Figure 9).<sup>122</sup> More importantly, recent discussions among local governments have raised the idea of the coordinated development and use of RICDs within the watershed.<sup>123</sup>

### Conservation Easements

A conservation easement is a legal agreement that restricts an individual landowner's use of his or her property for development purposes, in exchange for the landowner receiving state and federal tax benefits.<sup>124</sup> Under Colorado law, only a governmental entity or "land trust" designated as a section 501(c)(3) charitable organization can serve as the trustee for a conservation easement.<sup>125</sup> But with respect to the agreement itself, few limitations exist on what rights and what restrictions may be included in conservation easements.<sup>126</sup> Conservation easements may even include restrictions on the exercise of water rights associated with the property.<sup>127</sup> In this respect, conservation easements should be considered another valuable legal tool for local governments in the protection of local water resources.

One important limitation affects how conservation easements can restrict the use of related water rights. Colorado law only allows easement agreements to restrict the use of those water rights that are "beneficially used upon" the protected property.<sup>128</sup> In other words, the water right must continue to be applied to the land and cannot be used for instream flow or recreational purposes.<sup>129</sup> (Although, a conservation easement could allow for the temporary loan of associated water rights to the CWCB during severe drought conditions, as discussed above.) This use requirement does not, however, preclude the water rights from being used for conservation purposes. When water is used for irrigation or other similar purposes, the necessary diversions may detract from local stream flows, but the irrigation can still help to maintain important ecological and environmental functions. Irrigated land supports wildlife and surrounding vegetation, and even helps recharge the local groundwater resources. When irrigation is balanced with related instream flow protections, the full value of water – in the stream and on the land – can be realized.

Outside of this basic limitation, Colorado law imposes few restrictions on the specific language of an easement agreement. State law only requires that the specific provisions be "appropriate" to maintaining the land in a condition "consistent with the protection of open land, environmental quality or life-sustaining ecological diversity."<sup>130</sup> Such broad statutory language gives landowners and land trustees wide discretion in structuring specific agreements tailored to both the particular property and the conservation goals of the easement.



Figure 10. Continuing irrigation on the Sopris Mountain Ranch. This subdivision includes a 280-acre conservation easement, held by the Aspen Valley Land Trust, for the purpose of preserving wildlife habitat and scenic open-space.

There is a growing recognition among land trustees of the need to incorporate associated water rights into their conservation easements.<sup>131</sup> This is particularly true for those properties in which the conservation values include irrigated croplands, wetlands, or other water-dependent features.<sup>132</sup> For example, an easement agreement for agricultural property can require the landowner to continue to irrigate the land with related water rights (see Figure 10). Likewise, an easement for property with a lake or pond could include restrictions on the landowner from ever selling the storage water right necessary for the water feature. Depending on the property, such restrictions may be integral to preserving the historical condition of the land.

Conservation easements have proven an increasingly important tool for local governments in addressing the land-use impacts associated with major development projects,

providing mitigation in connection with subdivisions and planned-unit developments.<sup>133</sup> Generally, local governments manage and administer conservation easements through an open space and trails program that includes properties acquired not only through development exactions but also from direct public purchase, donations, and intergovernmental transfers.<sup>134</sup> The next step for local governments is to ensure that their conservation easements account for the historical water-use on the protected property and include related water rights when necessary.

## *Tools for Local Cooperation and Collaboration*

Colorado law provides local and regional interests, particularly local governments, with several means to formalize and carry out collaborative water management efforts.

### **Intergovernmental Agreements**

Intergovernmental agreements (IGAs) are contracts that formalize relationships between government bodies, define the authority of participating entities, and generally seek to achieve efficiencies through mutual cooperation and coordination. The Colorado Constitution protects the right of the State and local governments to contract with one another in order to “provide any function, service, or facility lawfully authorized to each of the [governmental] units.”<sup>135</sup> The legislation implementing this constitutional mandate specifically authorizes intergovernmental agreements for the purpose of coordinating local land-use planning and regulation.<sup>136</sup> The only requirement is that such contracts “set forth fully the purposes, powers, rights, obligations, and the responsibilities, financial and otherwise, of the contracting parties.”<sup>137</sup> With such broad constitutional and legislative directives, local governments have ample authority and discretion in contracting with each other over the coordinated use of their shared land-use and water management powers.

IGAs represent an important legal tool for local governments because they effectively provide local governments with the authority to regulate beyond their jurisdictions, encompassing the entire area covered by an agreement.<sup>138</sup> For this reason, IGAs are particularly useful for water management planning, given that local water supply projects often affect water resources outside the jurisdiction they are intended to serve.<sup>139</sup> Such agreements allow governments to plan for a regional and coordinated approach to addressing impacts of water development activities, and are often used in Colorado to identify how a particular water development project will be constructed and operated.<sup>140</sup>

The potential utility of IGAs to long-term water management planning in Colorado was well-demonstrated in the wake of the Homestake II dispute. After decades of expensive litigation, the Court of Appeals’ 1994 decision signaled a new era of cooperation between the Front Range and the West Slope, as water interests around the state began to recognize that negotiation is often far more productive than litigation.<sup>141</sup> In 1998, after several rounds of negotiations, Aurora, Colorado Springs, and a coalition of Eagle County interests entered into the Eagle River Memorandum of Understanding. A “memorandum of understanding” (MOU) is a unique type of intergovernmental agreement, which, depending on the language of the agreement, can serve either as a precursor to more formal legal documentation of an agreement, or as a valid and enforceable contract.

In the Eagle River MOU, Aurora and Colorado Springs agreed to abandon the Homestake II Project and work with Eagle County water interests in developing a smaller, more environmentally acceptable project that would serve both in-basin and out-of-basin water needs.<sup>142</sup> More recently, Denver Water and the Northern Colorado Water Conservancy District, which both hold sizable conditional water rights in the Eagle River Basin, have cooperated

with the parties to the Eagle River MOU in studying the feasibility of Wolcott Reservoir as a possible alternative source of water that could be used by all parties involved.<sup>143</sup>

The Eagle River MOU has since become the blueprint for other water negotiations around the state. Currently, Denver Water, the Northern Colorado Water Conservancy District, and water interests in Grand County are negotiating a similar agreement over future transmountain diversion projects on the Fraser and Colorado rivers.<sup>144</sup> Likewise, Denver Water and a group of West Slope representatives have discussed the idea of a formal agreement that would share the remaining undeveloped water for the entire Colorado River mainstem.<sup>145</sup> State leaders have even cited the cooperation demonstrated by the various interests in the Eagle River Basin as an important example for the development of the Interbasin Compact Process.<sup>146</sup>

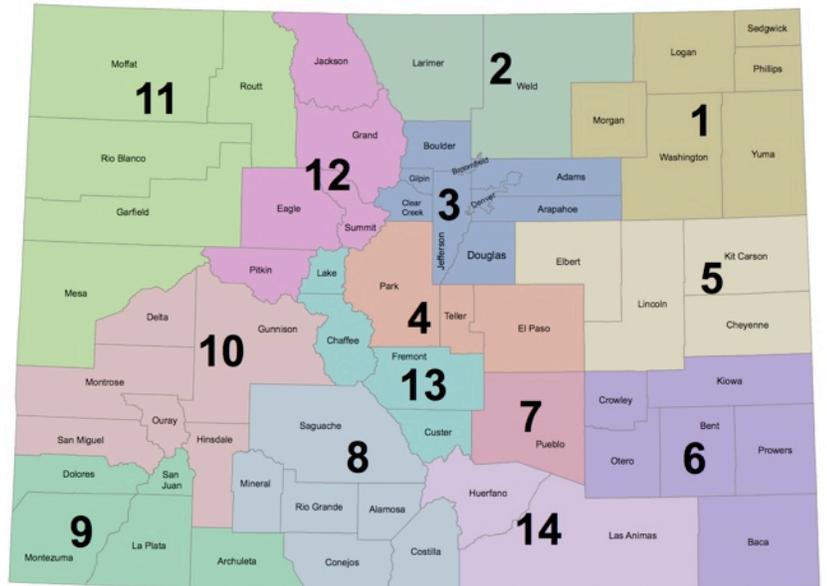


Figure 11. Colorado's Planning and Management Districts. (Colo. Dept. of Local Affairs)

### Intergovernmental Entities

Colorado law allows political subdivisions to contract for the “joint exercise” of any function, service, or facility lawfully authorized to each of the cooperating or contracting government units, “including the establishment of a separate legal entity to do so.”<sup>147</sup> Intergovernmental entities may be structured to require the sharing of costs and powers among member governments, or they can create new entities that are authorized to act directly in the place of local governments.<sup>148</sup> Such entities can also be designed to function in a more supportive role – for example, by providing loans or other financial assistance to member governments.<sup>149</sup>

In 1972, to further intergovernmental cooperation, Colorado Governor John A. Love ordered the formation of twelve regional “planning and management districts” encompassing certain counties within the state.<sup>150</sup> Since their formation, these districts (there now total fourteen; two were added to account for changing demographics) have taken on unique identities and roles – reflecting regional conditions as well as the priorities and prerogatives of the member entities (see Figure 11).<sup>151</sup> The three planning and management district organizations that fall within the Roaring Fork Watershed represent three completely different approaches to intergovernmental organization. None of these organizations represent all four counties.

The Associated Governments of Northwest Colorado (AGNC) (Region 11), which includes Garfield County, has gone through several iterations, but ultimately member governments decided to forego the new statutory authority altogether, and simply exist as an association.<sup>152</sup> On the other hand, the Region 10 League for Economic Assistance and Planning, Inc., which includes Gunnison County, is comprised as a section 501(c)(4) non-profit entity,



with a primary focus on regional economic development.<sup>153</sup> In yet another approach, the Northwest Colorado Council of Governments (NWCCOG) (Region 12), which includes Pitkin and Eagle counties, is organized as a fully-separate governmental entity, a structure that is evidenced in the extent of the council’s services and operations.<sup>154</sup>

With respect to water resources, NWCCOG is particularly active among planning and management district organizations. NWCCOG operates a Water Quality/Quantity Committee (commonly referred to as “Q/Q”) responsible for monitoring water development activities and legislative initiatives that affect water quality or quantity within the jurisdictions of member entities.<sup>155</sup> Q/Q provides member entities with public education on local water issues, technical and legal support for water supply planning and development, monitoring of transmountain diversion proposals, and intergovernmental facilitation on water-related matters.<sup>156</sup> Q/Q has been especially active in the Interbasin Compact Process, and recently received a \$315,000 grant from the CWCB to develop a methodology to quantify nonconsumptive needs with potential statewide application.<sup>157</sup>

In addition to Q/Q, NWCCOG also operates a “Watershed Services” program that is responsible for carrying out a regional water quality management plan, in compliance with section 208 of the federal Clean Water Act.<sup>158</sup> The regional “208 Plan,” last updated in 2002, identifies water quality problem areas and infrastructural needs, and provides recommendations to protect and enhance regional water quality at the regional and watershed level.<sup>159</sup> NWCCOG demonstrates the important role intergovernmental entities can play in state and regional water management planning.

Other types of intergovernmental entities outside planning and management districts include water and power authorities. Any combination of municipalities, special districts, or other political subdivisions of the state can form a water authority for the purpose of developing local water supplies.<sup>160</sup> Although they are intergovernmental entities, water authorities are still permitted to own and operate water supply facilities, as well as the associated water rights for such infrastructure.<sup>161</sup> Similarly, power authorities, which may only be formed by municipalities, are authorized to own and operate public electrical works, including hydroelectric facilities and the associated water rights.<sup>162</sup>



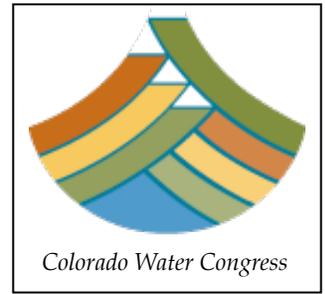
Acting on this legal authority, in 1981 the City of Aspen and Pitkin County agreed to form the Ruedi Water and Power Authority (RWAPA) for the purpose of developing hydropower facilities at Ruedi Reservoir.<sup>163</sup> Despite interest from other governments, Aspen and Pitkin County ultimately built the Ruedi hydropower facilities independently, and RWAPA no longer operates under its original statutory authority (that original statutory authority has never been officially rescinded or disavowed, although it has never been formally exercised either).<sup>164</sup> Instead RWAPA continues today, based on an IGA between member entities.<sup>165</sup>

RWAPA is currently comprised of eight member entities: Aspen, Basalt, Snowmass Village, Carbondale, and Glenwood Springs, plus Pitkin, Eagle, and Garfield counties.<sup>166</sup> RWAPA now serves as an intergovernmental consortium for public matters relating to Ruedi Reservoir and the Fryingpan River, and it is in this role that RWAPA is acting as the lead sponsor for the Roaring Fork Watershed Plan.<sup>167</sup> RWAPA demonstrates that regional intergovernmental representation can be achieved even outside a formal statutory designation – founded on formal agreement, but rooted in communication and cooperation.

### **Organizing for Conservation**

While intergovernmental entities are an important tool for local governments in cooperating for purposes of water management planning, these types of organizations necessarily exclude important stakeholders – private and special interests, such as mutual ditch companies, the oil and gas industry, and environmental groups. Colorado law expressly encourages state agencies, political subdivisions, and private entities to cooperate and share information for the purpose of “organizing for conservation” of the State’s water resources.<sup>168</sup> To this end, the General Assembly has

authorized local, regional, and State governmental entities to form or join organizations for the purpose of collaborating on water conservation and protection efforts.<sup>169</sup> Public entities can exercise their express statutory powers through such organizations, either conjunctively with other member entities or as part of a cohesive exercise of shared authority.<sup>170</sup> And the organization’s governmental authority will not be limited by the fact that private individuals and organizations are members.<sup>171</sup>



One notable example of the use of this statutory authority is the Colorado Water Congress (CWC), a nonpartisan, nonprofit organization representing primarily public and private water users from around the state. Formed in 1958, the CWC began with more than 300 active, dues-paying members and Colorado’s then First Assistant Attorney General, John B. Barnard, as the organization’s president.<sup>172</sup> Today, the mission of the CWC is to support and help finance the “formulation, development, construction, and operation of water resource development projects required for beneficial use by the people of Colorado and for the protection of Colorado’s water resources.”<sup>173</sup> The CWC has been particularly active in state ballot initiatives involving water resources and water resource management.<sup>174</sup> The CWC also plays an important role in lobbying for state and federal water legislation, including taking positions on controversial issues such as the public trust doctrine and area-of-origin protection.<sup>175</sup> The CWC demonstrates some of the inherent advantages of an organization that includes private interests, as well as just how broadly the term “organizing for conservation” can be interpreted.

Another important form of local organization is represented by the numerous watershed groups that exist around the state, such as the Eagle River Watershed Council, the Roaring Fork Conservancy, and the High Country Citizens’ Alliance, which are represented collectively at the state level by the Colorado Watershed Assembly, a 501(c)(3) nonprofit organization. In addition to working with each other, local governments must work with these types of organizations, particularly as a means to involve local citizens and interest groups in the water management and planning process.

## *Conclusion – Illuminating the Way Ahead*

Local interests suddenly find themselves at the forefront of water management planning in Colorado, at a time when the decisions really matter. West Slope interests will have to be active and involved to take advantage of this rare opportunity. The State has committed to a process for long-term water management planning that is built around negotiation, cooperation, and mutual agreement. Local governments, in turn, should adopt this model, employing it not only at a regional and state level, but, more importantly, at a *watershed level*.

Many legal tools are available to local governments for the purpose of protecting local stream flows and formalizing a framework for cooperation and collaboration among distinct governmental entities and private interests. But of all the tools available to local governments at this point in time, the Roaring Fork Watershed Plan is possibly the most important.

In these precarious times, local governments’ implementation of a “watershed management regime” is as much an economic decision as an environmental one. Watershed management offers local governments an efficient and effective way to plan for growth and to build healthy, sustainable communities (*see* Figure 12, below).

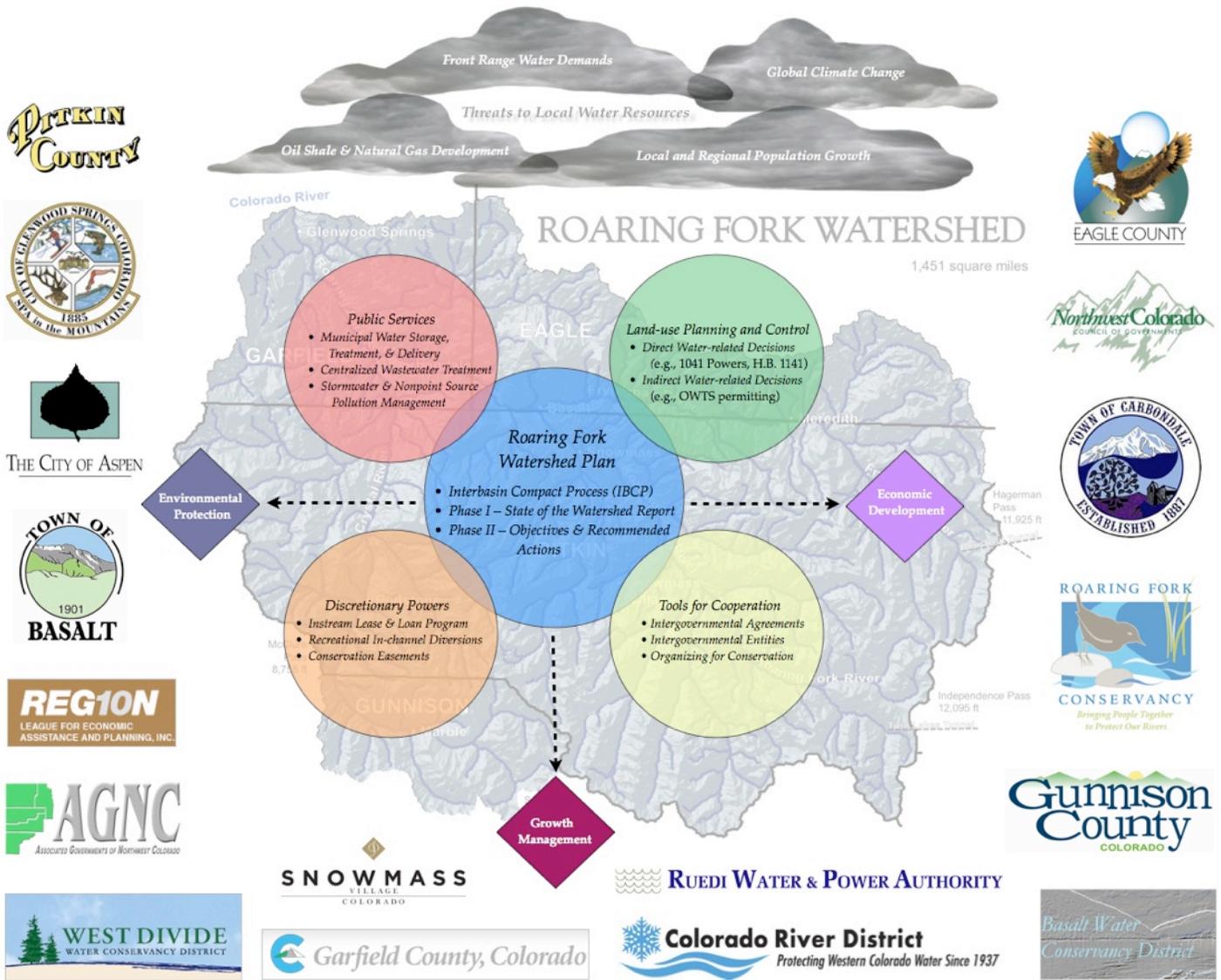


Figure 12. The Big Picture. Local governmental entities must work together, through the Roaring Fork Watershed Plan, to ensure the long-term, sustainable development and protection of local water resources. Given the importance of water to the people of Colorado, coordinated and cooperative watershed management is one of the most effective ways local governments can plan for the future of our state and our communities.

<sup>1</sup> Harris Sherman, "Interbasin Compact Process Quarterly Newsletter – 2nd Quarter, 2008" 1 (Jul. 2008) (available at <http://ibcc.state.co.us/News/>). Also see the similar quote from Justice Gregory Hobbs, Jr.: "We are no longer developing a water resource; we are learning how to share a developed resource." *As quoted in* George Sibley, "Colorado's Water for the 21st Century Act: Finally doing the right thing?," *Headwaters*, 7 (Spring 2009).

<sup>2</sup> Colo. Water Conservation Bd., "Draft Report – State of Colorado 2050 Municipal and Industrial Water Use Projections," § 2.2 (Jun. 2009) (available at <http://cwcb.state.co.us/IWMD/COsWaterSupplyFuture/CosWaterSupplyFuture.htm>). Specifically, statewide increases are projected to increase between 71 and 107 percent.

<sup>3</sup> *Id.* at § 5.2. (Note that the estimated shortages are based on the assumption that all the water development projects that are currently "reasonably expected to occur" are, in fact, built and fully implemented. These estimates also take into account the possible water demands associated with oil shale development in the Piceance Basin. These estimates do not, however, take into account any savings based on the implementation of added conservation measures, which could be significant. For example, statewide sampling among public water utilities in 2000 yielded an estimate for Colorado's average per capita water use of 210 gallons per day. The CWCB's most recent sampling produced an estimate of 183 gallons per person per day, a 13 percent decrease from the 2000 estimates. The decrease in the estimated average use may be due to better sampling, increased conservation efforts in the wake of the 2002 drought, and economic factors. Regardless, the difference amounts to a decrease in the projected water demand by 2030 of 198,000 acre-feet, which more than makes up for the statewide water supply shortfall projected for 2030, of 118,200 acre-feet.)

<sup>4</sup> *Id.* at tables 2.2 and 3.2

<sup>5</sup> *Id.* at table 3.2 (reference to "reasonably expected" water supply projects refers to the "Identified Projects and Processes" generated during the Statewide Watershed Supply Initiative).

<sup>6</sup> See Roaring Fork Watershed Plan, "Why the Roaring Fork Watershed Plan Matters," (Oct. 15, 2008); see also, Roaring Fork Watershed Plan, "The State of the Roaring Fork Watershed Report," (Nov. 2008) (both available at <http://www.roaringfork.org/sitepages/pid175.php>).

<sup>7</sup> See e.g., Russ George, "H.B. 1177: The Role of Dialogue and Negotiation in Charting Colorado's Water Future," *Colorado Water*, 4-5 (Aug. 2005) (comparing Colorado's current situation to 1922, when Colorado and the six other western states that share the Colorado River negotiated the Colorado River Compact: "Basins are attempting to gain advantages over others, and litigation is being used as the method of achieving their goals"). See also, Steven Schulte, "H.B. 1177: Water War and (or) Peace?," *Colorado Water*, 7-8 (Aug. 2005).

<sup>8</sup> See Colo. Rev. Stat. § 37-75-102 (Lexis 2008).

<sup>9</sup> See R. George, *supra* n. 7 at 4-5.

<sup>10</sup> With respect to the "efficient" reference, see Marie L. Livingston, "H.B. 1177: Investing in Colorado's Water Future," *Colorado Water*, 13-14 (Aug. 2005) (discussing the economic concerns underlying the Interbasin Compact Process); see also, Charles W. Howe and John D. Wiener, "Moving towards more efficient water markets: Institutional barriers and innovations," Univ. of Colo., Boulder (2006). With respect to the "equitable" reference, see preface to *Colorado Water for the 21st Century Act*, which states that the bill concerns the "negotiation of interbasin compacts regarding the equitable division of the State's waters, and making an appropriation in connection therewith" (emphasis added).

<sup>11</sup> Colo. Rev. Stat. §§ 37-75-104; 37-75-105(3) (Lexis 2008). According to Russ George, former executive director of the Colorado Department of Natural Resources, "The greater the dialogue among all concerned groups and individuals, the greater will be the legitimacy of any plan or solution developed by the roundtable.... These roundtables can find real solutions to water issues that might arise in Colorado, and these solutions can only benefit all the citizens of this state for generations to come." R. George *supra* n. 7 at 5.

<sup>12</sup> *Id.* at (2)(c).

<sup>13</sup> See R. George, *supra* n. 7 at 4. (“Upon the completion of the needs assessment, each basin will know what waters they have that are already appropriated, and how much water they have that is unappropriated and can possibly be used to help solve the shortfall of another basin and satisfy new demands in the basin.”)

<sup>14</sup> Jerd Smith, *Water expansion builds worries for some*, Rocky Mountain News (Jul. 18, 2008). For a current example of this type of negotiations, see Tonya Bina, “Grand County hopes to benefit from Front Range water-firming projects,” *Sky-Hi Daily News* (Jan. 15, 2010).

<sup>15</sup> See Colo. Water Conservation Bd., “Draft Report – Strategies for Colorado’s Water Supply Future” § 4.1.1.2 (2009)

<sup>16</sup> Colo. Rev. Stat. § 29-20-102 (Lexis 2008).

<sup>17</sup> Denver Water, “Water for Tomorrow: An Integrated Water Resource Plan,” 4 (Feb. 2002) (available at <http://www.denverwater.org/SupplyPlanning/Planning/FutureWaterSupply/IntegratedResourcePlan/>).

<sup>18</sup> Colo. Rev. Stat. § 24-65-102(1) (repealed 2005); § 24-65.1-101 (Lexis 2008).

<sup>19</sup> See Colo. Rev. Stat. §§ 24-65.1-201 and 24-65.1-203 (Lexis 2008).

<sup>20</sup> Colo. Rev. Stat. §§ 24-65.1-301 and 24-65.1-401 (Lexis 2008). Note, however, that the authority of counties and municipalities to review development projects under the purview of H.B. 1041 is not strictly limited to those affecting or involving previously designated areas and activities of state interest. In such a situation, the local government can still require a hearing, during which the government may make the formal designation of an area or activity of state interest, establish guidelines and regulations for any development affecting or involving the interest at stake, and make a final permitting decision with respect to the specific project in question. Colo. Rev. Stat. § 24-65.1-501(2)(b) (Lexis 2008).

<sup>21</sup> Colo. Rev. Stat. § 24-65.1-402; for the general criteria for the administration of areas and activities of state interest, see Colo. Rev. Stat. §§ 24-65.1-201 and 24-65.1-203 (Lexis 2008).

<sup>22</sup> Colo. Rev. Stat. § 24-65.1-501(1)(a) (Lexis 2008).

<sup>23</sup> *Id.* at (3) and (4).

<sup>24</sup> Colo. Rev. Stat. § 24-65.1-203(1)(a) and § 24-65.1-104(5) (Lexis 2008).

<sup>25</sup> Colo. Rev. Stat. § 24-65.1-204(1) (Lexis 2008).

<sup>26</sup> Caloia *et al.*, 3 U. Denver Water L. Rev. at 49 (1990).

<sup>27</sup> See *City of Colo. Springs v. Bd. of Co. Commrs.*, 895 P.2d 1105 (Colo. App. 1994).

<sup>28</sup> See generally Geoffrey M. Craig, “House Bill 1041 and Transbasin Water Diversions: Equity to the Western Slope or Undue Power to Local Government?,” 66 U. Colo. L. Rev. 791, 798. See also Mark Woods, “The Holy Cross Wilderness Area and Homestake II: Case History, Conflict Analysis, and Intractability,” Univ. of Colo. (1994) (available at [http://www.colorado.edu/conflict/full\\_text\\_search/AllCRCDocs/94-64.htm](http://www.colorado.edu/conflict/full_text_search/AllCRCDocs/94-64.htm)).

<sup>29</sup> Pub. L. No. 96-560, § 102(a)(5), 94 Stat. 3266 (1980).

<sup>30</sup> *City of Colo. Springs*, 895 P.2d at 1110-1111.

<sup>31</sup> *Id.* at 1112.

<sup>32</sup> *Id.* See also Colo. Rev. Stat. § 24-65.1-402(3) (Lexis 2008).

<sup>33</sup> *Id.*

<sup>34</sup> *City of Colo. Springs v. Bd. of Co. Commrs.*, 516 U.S. 1008 (1995) (denying certiorari). For more information on the significance of the Homestake II dispute to West Slope water interests, see generally Craig, *supra* n. 28.

<sup>35</sup> *City of Denver v. Grand Co.*, 782 P.2d 753, 764-765 (Colo. 1989). See also Colo. Rev. Stat. § 24-65.1-106(1)(b) (Lexis 2008) (stating that local 1041 powers cannot be construed in any manner that would “modify or amend existing laws or court decrees with respect to the determination and administration of water rights.”)

<sup>36</sup> *City of Colo. Springs*, 895 P.2d at 1115 (1994).

<sup>37</sup> *Id.* at 1116.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Id.* at 1115.

<sup>41</sup> *Id.* For further discussion of the limitations on local regulations with respect to water supply projects see Geoffrey M. Craig, *House Bill 1041 and Transbasin Water Diversions: Equity to the Western Slope or Undue Power to Local Government?* 66 U. Colo. L. Rev. 791, 799-822 (1995).

<sup>42</sup> *Id.* at 825.

<sup>43</sup> See Eagle Co., *Eagle County Land Use Regulations*, §§ 6.01-6.05 (2005); Garfield Co., *Garfield County Unified Land Use Resolution*, art. XIV (2008); Gunnison Co., “Regulations for Special Development Projects,” (1994); and Pitkin Co., *Pitkin County Land Use Code*, § 2-40-140 and Ch. 7 (2003).

<sup>44</sup> Colo. Rev. Stat. §§ 29-20-301 through 306 (Lexis 2008).

<sup>45</sup> Colo. Rev. Stat. § 29-20-103(1) (providing that the requirements of H.B. 1141 are limited to “an application regarding a specific project that includes new water use in an amount more than that used by fifty single-family equivalents, or fewer as determined by the local government.”). Note that the “or fewer” provision allows local governments to require developers to prove an adequate water supply for projects of *less than* 50 single-family homes.

<sup>46</sup> Colo. Rev. Stat. § 29-20-302 (Lexis 2008) (defining “adequate” as “sufficient for build-out of the proposed development in terms of quality, quantity, dependability, and availability to provide a supply of water for the type of development proposed...”). Colo. Rev. Stat. § 29-20-303(1) (Lexis 2008) (prohibiting local governments from approving a development permit without first determining that the applicant has proven the adequacy of the proposed development’s water supply).

<sup>47</sup> Under the 1974 Local Government Land Use Control Enabling Act, local governments have the authority “to plan for and regulate the use of land by:... (f) Providing for phased development of services and facilities; [and] (g) Regulating the use of land on the basis of the impact thereof on the community or surrounding areas...” Colo. Rev. Stat. § 29-20-104 (Lexis 2008). Note also that under a 1972 law, *counties* were required to adopt subdivision regulations, including requirements that subdividers submit “Adequate evidence that a water supply that is sufficient in terms of quality, quantity, and dependability will be available to ensure an adequate supply of water for the type of subdivision proposed.” Colo. Rev. Stat. § 30-28-133 (Lexis 2008). H.B. 1141 imposes a similar requirement for all local governmental entities, including municipalities.

<sup>48</sup> Water Info. Program, “Prove it,” *Newsletter* (Mar. 2008) (available at <http://waterinfo.org/node/1683>). Joe Hanel, “Gov. Ritter signs measures to ensure adequate water,” *Durango Herald* (May 30, 2008).

<sup>49</sup> Phillip Yates, “If Colorado House bill becomes law, developers would have to address water needs first,” *Glenwood Springs Post Independent* (Apr. 19, 2008).

<sup>50</sup> Water Info. Program, “Ritter signs ‘unique measure’ to ensure adequate water supply,” *Newsletter* (Sept. 2009) (available at <http://waterinfo.org/node/1994>).

<sup>51</sup> Water Info. Program, *supra* n. 48.

<sup>52</sup> Colo. Rev. Stat. §§ 29-20-301(1)(b) (Lexis 2008).

<sup>53</sup> Colo. Rev. Stat. §§ 25-10-104(2) and 25-10-110 (Lexis 2008).

<sup>54</sup> With regard to the State guidelines, see Water Quality Control Div., Colo. Dept. of Pub. Health and Env., “Guidelines on individual sewage disposal systems,” 5 Colo. Code Regs. 1003-6 (2004). The minimum standards are codified in the *Individual Sewage Disposal Systems Act*, Colo. Rev. Stat. § 25-10-105(1) (Lexis 2008).

<sup>55</sup> Colorado has yet to embrace a performance-based approach to OWTS management that includes mechanisms for the verification of system performance, although this was a recommendation of the Individual Sewage Disposal Steering Committee appointed by the Colorado Department of Public Health and Environment in 2001 to address issues regarding potential water quality impacts from OWTSs. See B.L. Scheffe, J.D. Jatko, and S. Gallaudet, “Colorado Onsite Research and Evaluation Study Phase II/III – Options for a Self-Sustaining Onsite Wastewater Treatment Improvement Program for the State of Colorado” (circa 2008).

<sup>56</sup> Reagan Waskom, “Small Flows, Big Consequences,” *Colorado Water*, 1 (Aug. 2007).

<sup>57</sup> *Id.*

<sup>58</sup> Onsite wastewater treatment systems are often used in rural, unincorporated areas, along with private groundwater wells, because most county regulations require that it be infeasible for the structure to connect to a municipal or other centralized wastewater or domestic water treatment system. These systems account for a significant portion of Colorado’s recent growth because the 7,000 to 10,000 new systems represent roughly an equal number of new single-family dwellings.

<sup>59</sup> Colo. Rev. Stat. §§ 37-92-301(3) (Lexis 2008). For more information on the Division of Water Resources’ role in groundwater administration, see Div. of Water Resources, Colo. Dept. of Nat. Resources, “Guide to Colorado well permits, water rights, and water administration,” (Jan. 2008) (available at <http://water.state.co.us/pubs/wellpermitguide.pdf>).

<sup>60</sup> There are three main categories of exempt groundwater well permits: First, permits for wells that supply water for household use in a single family dwelling on a lot of less than 35-acres. For subdivided parcels, this first type of exempt well permit is only available for lots subdivided prior to June 1, 1972 or created by an exemption to local subdivision laws. The second type of exempt permit is for a single well on a lot greater than 35-acres that is used to service three or fewer single-family dwellings, irrigate less than one-acre of lawn, and provide water to livestock. The third type of exempt permit is for wells that provide drinking and sanitary water to a small business on a lot created prior to June 1, 1972 or by an exemption to the subdivision laws. Exempt well permits are generally limited to 15 gallons per minute and require some kind of non-evaporative septic/leach field system. In addition, exempt well permits will generally not be issued where either a municipality or a water district can provide water to the property. See Colo. Rev. Stat. § 37-92-602(1)(b)-(c) and (3)(b)(II)(A) (Lexis 2008). See also E. Marx, R. Waskom and D. Wolfe, “Private Wells for Home Use,” *Colo. St. Univ. Cooperative Extension* (Jan. 2006) (available at <http://www.ext.colostate.edu/pubs/natres/06700.pdf>).

<sup>61</sup> See Div. of Water Resources, *supra* n. 59.

<sup>62</sup> There are approximately 210,000 exempt wells in the State. See David Beaujon, Senior Analyst, Colo. Legis. Council, “Regulation of Exempt Wells,” Memorandum to Water Resources Comm. (Sept. 28, 2009) (available at [http://www.colorado.gov/cs/Satellite?c=Document\\_C&childpagename=CGA-LegislativeCouncil%2FDocument\\_C%2FCLCAddLink&cid=1251566855947&pagename=CLCWrapper](http://www.colorado.gov/cs/Satellite?c=Document_C&childpagename=CGA-LegislativeCouncil%2FDocument_C%2FCLCAddLink&cid=1251566855947&pagename=CLCWrapper)).

<sup>63</sup> See R. Waskom, *supra* n. 56 at 1.

<sup>64</sup> *Id.* One study near Evergreen, Colorado found an average of 15.6 percent consumption of pumped domestic groundwater, with 14.8 percent of the water consumed in the residence and 0.8 percent loss due to evapotranspiration. William Paul, Eileen Poeter, Roy Laws “Consumptive Loss from an Individual Sewage Disposal System in a Semi-Arid Mountain Environment,” *Colorado Water*, 6-11 (Aug. 2007). While a difference of only 3.3 percent in the total amount of consumptive use may not amount to much water at an individual level, when considered statewide, the difference can be significant.

<sup>65</sup> Local land-use code provisions may require developers to submit evidence of an adequate supply of water, pursuant to H.B. 1141 or other land-use authority. These technical reports can include information that pertains to the water *quantity* impacts associated with groundwater use. For example, Eagle County requires that such reports, when completed in conjunction with PUD and subdivision proposals, include analysis of the “cumulative effect upon existing water rights due to the use of individual domestic wells.” Eagle Co., *Eagle County Land Use Regulations*, §§ 4-680(A)(2)(b), 5-280(4)(a)(2)(v)(i)(dd), and 5-240(3)(a)(10)(a)(i)(dd) (2008). Garfield County also requires a similar report for approval of all land-use change permits, which must “address the impacts to ground water resources in the area.” Garfield Co., *Garfield County Unified Land Use Resolution*, § 7-104(B) (2009). Garfield County is unique in that it limits individual on-site wells to developments with densities of less than one dwelling unit per two acres. *Id.*

<sup>66</sup> Colo. Rev. Stat. § 25-10-104(1) (Lexis 2008) (stating that state guidelines for local rules provide “*minimum standards for the location, construction, performance, installation, alteration, and use of individual sewage disposal systems*” (emphasis added)). See also Colo. Rev. Stat. § 25-10-106(1) (Lexis 2008) (stating that “Rules adopted by local boards of health ... shall govern all aspects of the application for and issuance of permits, the inspection, testing, and supervision of installed systems...”).

<sup>67</sup> See Colo. Rev. Stat. § 25-10-105(1) (Lexis 2008) (noting that local rules “shall govern *all aspects* of the performance ... and use of individual sewage disposal systems” (emphasis added)).

<sup>68</sup> Colo. Rev. Stat. § 25-10-111 (Lexis 2008).

<sup>69</sup> *Id.*

<sup>70</sup> Colo. Rev. Stat. § 29-20-102 (Lexis 2008).

<sup>71</sup> Colo. Rev. Stat. § 29-20-104(1)(h) (Lexis 2008).

<sup>72</sup> With respect to impact fees and exactions, see Colo. Rev. Stat. §§ 29-20-104.5(2) and 29-20-203 (Lexis 2008). With respect to building codes, see Colo. Rev. Stat. § 30-28-201 (for counties) and § 31-15-601 (for municipalities) (Lexis 2008). And with respect to subdivision regulations, see Colo. Rev. Stat. §§ 30-28-101(10) and 30-28-133 (Lexis 2008). Regarding subdivision regulations, note that parcels of land less than 35 acres can qualify for an exempt well permit if the property either was subdivided prior to June 1, 1972, or it is exempted from local subdivision regulations. See Colo. Rev. Stat. § 37-92-602(1)(b)-(c) and (3)(b)(II)(A) (Lexis 2008); regarding subdivision exemptions see Colo. Rev. Stat. § 30-28-101(10).

<sup>73</sup> Waskom, *supra* n. 56 at 1.

<sup>74</sup> Colo. Municip. League, “The State of Our Cities and Towns,” 1 (2009). See also David M. Freeman, “H.B. 1177: Sociology of Water Tables,” *Colorado Water* (Aug. 2005) (positing that Colorado’s public and quasi-public organizations have provided the “kind of control over water that sustains our civilization,” by empowering “individual citizens to do things together that cannot be done as individual producers and consumers in private marketplace exchange.”)

<sup>75</sup> Dan Merriman and Anne M. Janicki, “Colorado’s Instream Flow Program – How and Why It’s Good For Colorado,” Colo. Water Conserv. Bd., 6 (2005) (available at <http://cwcb.state.co.us/NR/rdonlyres/6333F3FC-E2F8-4E7E-9BD3-690FCC4285D1/0/FinalRiparianAssocPaper.pdf>).

<sup>76</sup> For example, during the 2002 drought, as sections of the Upper Roaring Fork River ran dry, shareholders of the Salvation Ditch Company were purportedly willing to allow their senior water rights, still in priority, to be used for instream flow purposes, but legal barriers made such an arrangement impossible. See Janet Urquhart, “Pitkin County water rights could boost Roaring Fork River,” *Aspen Times* (Oct. 26, 2009).

<sup>77</sup> See D. Merriman and A. Janicki, *supra* n. 75 at 6.

<sup>78</sup> *Id.* at 1.

<sup>79</sup> Colo. Rev. Stat. § 37-92-102(3) (Lexis 2008).

<sup>80</sup> See Colo. Water Conserv. Bd., “Completed Transactions,” (available at <http://cwcb.state.co.us/StreamAndLake/WaterAcquisitions/CompletedTransactions/>) (last updated Dec. 2006).

<sup>81</sup> See D. Merriman and A. Janicki, *supra* n. 75 at 6.

<sup>82</sup> Colo. H.B. 02-156, 63rd Gen. Assembly, 2d Reg. Sess. (May 21, 2002).

<sup>83</sup> See D. Merriman and A. Janicki, *supra* n. 75 at 5.

<sup>84</sup> *Id.* This new authority permits the CWCB to use acquired water rights to restore and rehabilitate degraded streams. See Colo. Rev. Stat. § 37-92-102(3) (Lexis 2008).

<sup>85</sup> Colo. Water Conserv. Bd., “Prehearing Statement of Staff of Colorado Water Conservation Board,” 10 (Nov. 16, 2009) (available at <http://cwcb.state.co.us/StreamAndLake/WaterAcquisitions/Notices/>).

<sup>86</sup> *Id.*

<sup>87</sup> H.B. 156 was partly intended to satisfy the demands of environmentalists who sought a bill or ballot initiative that would allow private entities to hold water rights for instream flow purposes. To allow private interests a means by which to use their own rights to preserve or improve local stream flows, H.B. 156 added the term “donation” to the list of general types of transactions through which the CWCB can acquire water rights used for other purposes. See Linda Bassi, “The Evolution of the Law Regarding Colorado’s Instream Flow Program,” Colorado Cattlemen’s Association Meeting, Colorado Springs, Colo. (Nov. 20, 2008).

<sup>88</sup> In 2003 the General Assembly expanded on this donation concept in H.B. 1320, which allowed farmers and irrigators to temporarily loan their water rights to the CWCB for instream flow purposes, but only at times when the governor declared a drought. 64th Gen. Assembly, 1st Reg. Sess. (Jun. 5, 2003). In 2005 the law was again changed, through H.B. 1039, to allow for such loans in three out of every ten years, thus eliminating the requirement that the governor declare an emergency. 65th Gen. Assembly, 1st Reg. Sess. (Mar. 25, 2005). Finally in 2007, the General Assembly passed H.B. 1012, which amended the legal definition of abandonment of a water right so as to exclude temporary water loans for instream flow purposes from consideration in any abandonment proceeding. 66th Gen. Assembly, 1st Reg. Sess. (Mar. 14, 2007). Prior to H.B. 1012, even though irrigators could loan water rights to the CWCB for instream flow purposes, they were technically not diverting such water, and thus were at risk of losing their right by abandonment.

<sup>89</sup> Colo. Rev. Stat. § 37-83-105(2)(a) (Lexis 2008).

<sup>90</sup> *Id.*

<sup>91</sup> *Id.*

<sup>92</sup> Colo. Rev. Stat. § 37-92-103(2)(b)(V) (Lexis 2008).

<sup>93</sup> Colo. H.B. 08-1280, 66th Gen. Assembly, 2nd Reg. Sess. (Apr. 21, 2008).

<sup>94</sup> Colo. Rev. Stat. § 37-92-103(2)(b)(VI) (Lexis 2008).

<sup>95</sup> Colo. Rev. Stat. § 37-92-102(3) (Lexis 2008). See also Colo. Rev. Stat. § 37-92-305(3)(b) (Lexis 2008).

<sup>96</sup> See Pitkin Co., “Proposed Trust Agreement” (Jan. 15, 2009) (available at <http://cwcb.state.co.us/StreamAndLake/WaterAcquisitions/Notices/>).

<sup>97</sup> Pitkin Co., “Prehearing Statement of Board of County Commissioners of Pitkin County,” 3 (Nov. 16, 2009) (available at <http://cwcb.state.co.us/StreamAndLake/WaterAcquisitions/Notices/>).

<sup>98</sup> *Id.* at 10.

<sup>99</sup> *Id.*

<sup>100</sup> Pitkin Co., *supra* n. 96 at 3.

<sup>101</sup> Pitkin Co., *supra* n. 97 at 2. Brent Gardner-Smith, “State board approves water trust with PitCo,” Aspen Daily News (Nov. 17, 2009) (quoting Pitkin County Commissioner Rachel Richards).

<sup>102</sup> Objectors included the Basalt Water Conservancy District, Starwood Metro. District, Willow Creek Ditch and Herrick Ditch Company, and Roaring Fork Land and Cattle Company.

<sup>103</sup> Arguments against the trust included, in part, the following charges: its possible effects on the State of Colorado's ability to make maximum beneficial use of state water; the use of the trust itself as a means of transferring Pitkin County's water rights to the CWCB; the possible effects of the trust on the operations of Green Mountain Reservoir; and the degree to which the environment would actually be preserved or improved to a reasonable degree by the trust. See Pitkin Co., *supra* n. 97 at 2. Regarding the CWCB's final vote, see Brent Gardner-Smith, *supra* n. 101.

<sup>104</sup> See e.g., Kristine Krandall, "Fryingpan Valley Economic Study," Roaring Fork Conservancy (Jun. 21, 2002) (available at <http://www.roaringfork.org/sitepages/pid136.php>).

<sup>105</sup> Colo. Rev. Stat. § 37-92-103(4) (Lexis 2008). For background on the controversy surrounding recreational water rights, see "Colorado Board Adopts Rules For 'Recreational In-Channel Diversion' Water Rights," Christopher L. Thorne (Jan. 15, 2002) (available at <http://www.westernwaterlaw.com/articles/ABAarticle.htm>)

<sup>106</sup> Colo. Rev. Stat. § 37-92-103(7) (Lexis 2008).

<sup>107</sup> *City of Thornton v. City of Fort Collins*, 830 P.2d 915, 931 (Colo. 1992).

<sup>108</sup> *Id.*

<sup>109</sup> Colo. Sen. 01-216, 63rd Gen. Assembly, 1st Reg. Sess. (Jun. 5, 2001).

<sup>110</sup> Colo. Rev. Stat. § 37-92-103(10.3) (Lexis 2008).

<sup>111</sup> *Id.*

<sup>112</sup> *Id.*

<sup>113</sup> Reed D. Benson, "'Adequate Progress,' or Rivers Left Behind? Developments in Colorado and Wyoming Instream Flow Laws Since 2000," 36 *Envtl. L.* 1283, 1296 (2006).

<sup>114</sup> *Id.* at 1309, n. 91.

<sup>115</sup> Colo. Sen. 06-037, 65th Gen. Assembly, 2d Reg. Sess. (May 11, 2006).

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

<sup>118</sup> *Id.* See also, Colo. Rev. Stat. § 37-92-305(13)(f)(I) (Lexis 2008).

<sup>119</sup> R. Benson, *supra* n. 113 at 1285.

<sup>120</sup> *Concerning the Application for Water Rights for the City of Aspen, Pitkin County, Colorado*, Div. 5 Water Court, case no. 2000CW284 (2000).

<sup>121</sup> *Application for Surface Water Rights for Recreational In-channel Uses*, Div. 5 Water Court, case no. 2006CW77 (2006) (available at <http://cwcb.state.co.us/WaterSupply/Recreational/PendingRICDApplications/RICDPendApps.htm>).

<sup>122</sup> Janet Urquhart, "Pitkin County, Glenwood Springs governments stress importance of water rights in Tuesday talks," *Glenwood Springs Post Independent* (Oct. 7, 2009).

<sup>123</sup> *Id.*

<sup>124</sup> See generally Colorado Open Space Alliance, "Holding Conservation Easements: A Local Government Best Practices Handbook," 7 (Sept. 2009) (available at [http://www.coloradoopenspace.org/conference/2009\\_best\\_practices.pdf](http://www.coloradoopenspace.org/conference/2009_best_practices.pdf)).

<sup>125</sup> Colo. Rev. Stat. § 38-30.5-104(2) (Lexis 2008).

<sup>126</sup> See Colo. Rev. Stat. § 38-30.5-104 (Lexis 2008).

<sup>127</sup> Colo. Rev. Stat. § 38-30.5-102 (Lexis 2008).

<sup>128</sup> *Id.*

<sup>129</sup> Note that although Colo. Rev. Stat. § 37-92-103(2) (Lexis 2008) provides that for the purpose of determining abandonment of a water right, “no intent to discontinue permanent use shall be found ... for the duration that: (a) The land on which the water right has been historically applied is enrolled under a federal land conservation program...” It’s unclear, but this provision could potentially protect a water right used in accordance with a federally-recognized conservation easement agreement.

<sup>130</sup> Colo. Rev. Stat. § 38-30.5-102 (Lexis 2008).

<sup>131</sup> See Peter D. Nichols, “Water Rights Handbook for Colorado Conservation Professionals,” Bradford Publishing Co. (2005)

<sup>132</sup> *Id.*

<sup>133</sup> See e.g., Eagle Co., *Eagle County Site Development Standards*, art.4, div. 4-7, § 4-700 (2008); Garfield Co., *Garfield County Unified Land Use Resolution*, art. VII, div. 4, § 7-405 (2008); Gunnison Co., “Land Use Resolution,” art. 1, § 1-120 (2001); and Pitkin Co., *Pitkin County Land Use Code*, §§ 8-40-30 and 8-60-30 (2008).

<sup>134</sup> See Colo. Open Space Alliance, *supra* n. 124 at 8.

<sup>135</sup> Colo. Const., art. XIV, § 18(2) (Lexis 2008).

<sup>136</sup> Colo. Rev. Stat. §§ 29-1-201 through 29-1-205 (Lexis 2008) (original sections enacted in 1971). Colo. Rev. Stat. § 29-20-105 (Lexis 2008) (agreements concerning land-use planning).

<sup>137</sup> Colo. Rev. Stat. § 29-1-203(2) (Lexis 2008)

<sup>138</sup> See generally Office of Smart Growth, Colo. Dept. of Local Affairs, “Planning for Growth – Intergovernmental Agreements in Colorado” (Aug. 2006) (available at <http://www.dola.state.co.us/dlg/osg/docs/IGAhandbook.pdf>).

<sup>139</sup> Barbara Green and John Alby, “Watershed planning,” 1 U. Denv. Water L. Rev. 75, 82 (1997).

<sup>140</sup> *Id.*

<sup>141</sup> For one example of an earlier round of Front Range-West Slope negotiations, see Gregory M. Silkensen, “Windy Gap: Transmountain Water Diversion and the Environmental Movement,” *Colo. Water Resources Research Inst.* (Aug. 1994).

<sup>142</sup> See Jerd Smith, “Talks under way on landmark water project in Eagle County,” *Rocky Mountain News* (Oct. 6, 2004 ). See also Red Lodge Clearinghouse, “Eagle River Assembly,” (available at <http://rlch.org/content/view/186/36/>).

<sup>143</sup> See Grand River Consulting, “Wolcott reservoir Feasibility Assessment – Phase I Investigation,” (Jun. 2004).

<sup>144</sup> Mark Jaffe, “Colorado water war ends in deal,” *Denver Post* (May 1, 2009). See also Denver Water, Citizens Advisory Comm., “CAC Minutes for Meeting of May 21, 2009” (May 21, 2009) (noting that the agreement is not yet formalized). See also Tonya Bina, “Grand County hopes to benefit from Front Range water-firming projects,” *Sky-Hi Daily News* (Jan. 15, 2010).

<sup>145</sup> See Cliff Thompson, “Liquid coalition forming along the Colorado,” *Vail Daily* (Feb. 2, 2005).

<sup>146</sup> *Id.*

<sup>147</sup> Colo. Rev. Stat. § 29-1-203(4) (Lexis 2008).

<sup>148</sup> *Id.* at (1).

<sup>149</sup> *Id.* at (5).

<sup>150</sup> Gov. John A. Love, *Executive Order of Nov. 17, 1972*, “Establishment of Planning and Management Districts within the State of Colorado.”

<sup>151</sup> *Id.*

<sup>152</sup> See Assoc. Governments of Northwest Colo., *Articles of Association*, art. I (Feb. 5, 2009); see also Doralyn Genova, *Thirtieth Anniversary Report – Associated Governments of Northwest Colorado*, (Apr. 2004) (both available at <http://www.agnc.org/aboutus.html>).

<sup>153</sup> See Region 10 Leag. for Econ. Assist. & Planning, Inc., “Six Counties and 24 Municipalities on One Powerful Team,” (available at [http://www.region10.net/about/about\\_region10.htm](http://www.region10.net/about/about_region10.htm)).

<sup>154</sup> See Northwest Colo. Coun. of Governments, *Articles of Association*, art. I (available at <http://www.nwc.cog.co.us/index.php/about/bylaws-articles-of-incorporation/>).

<sup>155</sup> See Northwest Colo. Coun. of Governments, QQ Comm., *Board Handbook & Informational Water Packet*, (available at [http://www.nwc.cog.co.us/docs/qq/qq\\_HandbookComplete2008.pdf](http://www.nwc.cog.co.us/docs/qq/qq_HandbookComplete2008.pdf)).

<sup>156</sup> *Id.*

<sup>157</sup> See Shanna Koenig, *NWCCOG Courier*, 7 (May 2009); see also Northwest Colo. Coun. of Governments, QQ Comm., “Scope of Services 2009” (available at [http://www.nwc.cog.co.us/docs/qq/scopeofwork\\_2009.pdf](http://www.nwc.cog.co.us/docs/qq/scopeofwork_2009.pdf)).

<sup>158</sup> Section 208 of the Clean Water Act is intended to encourage regional approaches to water quality management, by providing regional public agencies (i.e., intergovernmental entities) with the power to serve as regional coordinators of water quality. Section 208 plans generally include recommendations for ways in which to protect and enhance regional water quality, the identification of major water quality issues within the area, input on suitable water quality standards and classifications that should apply to individual streams and lakes, and the formal designation of a regional water quality management plan. See NWCCOG Watershed Services, “Program Overview,” (available at <http://www.nwc.cog.co.us/index.php/programs/watershed-services/>).

<sup>159</sup> See Northwest Colo. Coun. of Governments Watershed Services, “Volume 1: Policy Plan,” *Regional Water Quality Management Plan*, 4-5 (2002) (available at [http://www.nwc.cog.co.us/docs/wss/RWQMP208\\_vol1policyplan.pdf](http://www.nwc.cog.co.us/docs/wss/RWQMP208_vol1policyplan.pdf)

<sup>160</sup> Colo. Rev. Stat. § 29-1-204.2 (Lexis 2008).

<sup>161</sup> *Id.* at (1).

<sup>162</sup> Colo. Rev. Stat. § 29-1-204 (Lexis 2008).

<sup>163</sup> Ruedi Water & Power Auth. website, “Who We Are” (accessed Sept. 2, 2009) ([http://www.rwapa.org/who\\_we\\_are.html](http://www.rwapa.org/who_we_are.html)).

<sup>164</sup> *Id.*

<sup>165</sup> *Id.* See also Ruedi Water & Power Authority Bylaws (accessed Sept. 2, 2009) (<http://www.rwapa.org/bylaws.html>).

<sup>166</sup> Ruedi Water & Power Auth. website, *supra* n. 163.

<sup>167</sup> *Id.*

<sup>168</sup> Colo. Rev. Stat. § 37-40-101 (Lexis 2008).

<sup>169</sup> Colo. Rev. Stat. § 37-40-102 (Lexis 2008).

<sup>170</sup> *Id.*

<sup>171</sup> *Id.*

<sup>172</sup> Colo. Water Cong., “From Cold Shoulder to Helping Hands: How the Water Congress Was Won,” (available at <http://www.cowatercongress.org/aboutcwc/history.aspx>).

<sup>173</sup> Colo. Water Cong., “2009 Colorado Water Congress Policies,” (available at <http://www.cowatercongress.org/aboutcwc/policies.pdf>).

<sup>174</sup> See Stephen H. Leonhardt and Maria E. Hohn, “Initiatives – The Historic and Current Role of the Colorado Water Congress; Legal Limits on Public Advocacy” (2009) (available at <http://www.cowatercongress.org/AnnualConvention/program.aspx>).

<sup>175</sup> Colo. Water Cong., “2009 Colorado Water Congress Policies,” *supra* n. 173.

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## *Appendix I: The Past, Present, and Future of Transmountain Diversion Projects*

### **Early Projects**

When the U.S. Geological Survey, led by Ferdinand V. Hayden, arrived in Colorado in 1869 for its third summer of surveying in the Rocky Mountains, the expedition found ditch and canal construction already underway on the Front Range.<sup>1</sup> A decade before, prospectors had discovered gold near Pikes Peak, precipitating Colorado's first gold rush.<sup>2</sup> Subsequent gold strikes bolstered the rush of young "Argonauts" from eastern cities to the Colorado Territory.<sup>3</sup>

While the young territory's mineral prospects ebbed and flowed, cities like Denver, Golden, and El Paso (today's Colorado Springs) continued to grow along the Front Range, building around the merchants who had come to make a living "mining the miners."<sup>4</sup> Beyond the early entrepreneurs and prospectors, many of Colorado's early settlers had a strong agrarian ethic, and with the rapidly developing nearby markets, farming quickly became established in the fertile prairies flanking the Rockies.<sup>5</sup>

To meet their growing water needs, Colorado's early settlers formed ditch companies to build and operate canal and reservoir works along the Front Range.<sup>6</sup> While irrigation allowed the formerly barren prairie to flourish, the limited natural water supplies quickly became apparent to Colorado's new inhabitants.<sup>7</sup> Even before the extended drought of the early 1890s, the South Platte and the Arkansas were already considered over-appropriated.<sup>8</sup>

With no water left for additional development, farms and cities turned to transmountain diversions of water from the West Slope as a means to augment the limited natural water supplies on the Front Range. Not only was the West Slope far less populated, but its precipitation was far more abundant.<sup>9</sup> In 1890, in the mountains of what would eventually become Rocky Mountain National Park, the Larimer Ditch Company began work on a massive earthen channel designed to divert a portion of the headwaters of the Colorado River over La Poudre Pass for irrigation in the Cache La Poudre Valley (see Figure 1).<sup>10</sup> By October of 1890, with the first eight miles of digging complete, the "Grand Ditch" began to transfer water across the Continental Divide.<sup>11</sup>

In the subsequent years, the Grand Ditch was extended to become a 14.3-mile scar across the face of the Never Summer Range, allowing for the diversion of up to 17,685 acre-feet of water each year to the Front Range.<sup>12</sup> Yet the Grand Ditch, with an average grade of less than 0.2 percent, represented the easiest and most accessible of the feasible transmountain diversion projects.<sup>13</sup> As the following decades proved, only gravity stood in the way of farmers and cities seeking to divert the flow of streams on the West Slope to the Front Range and Eastern Plains.

Between 1880 and the early 1930s, water users on the Front Range turned to ditch companies and other private entities for the development of transmountain diversion projects.<sup>14</sup> Like the Larimer County Ditch Company (which eventually sold its rights in the Grand Ditch to the Water Supply & Storage Company), farmers and other agricultural interests were the main force behind many of these early projects.<sup>15</sup> Similarly, in 1917 a group of farmers in the Arkansas River Basin formed the Twin Lakes Reservoir and Canal Company, for the purposes of building and operating the Independence Pass



*Figure 1. Japanese and Mexican workers dug mile after mile of the Grand Ditch using only picks and shovels (circa 1904). (Fort Collins Museum)*

Transmountain Diversion Project. Today, that project diverts up to 39,292 acre-feet of water annually from the headwaters of the Roaring Fork River to the Arkansas River Basin.<sup>16</sup>

### **The Colorado-Big Thompson Project**

By the 1930s many of the easier transmountain diversions were already built, and further development required increasingly elaborate and costly projects.<sup>17</sup> At the same time, the first summers of the Dust Bowl scorched the plains, ruining nearly \$47 million of crops in the eastern half of Colorado.<sup>18</sup> The growing sense of urgency among farmers spurred Colorado to push for federal support of a major transmountain diversion project that would divert water from the headwaters of the Colorado River to the South Platte River Basin.<sup>19</sup> While the proposal initially generated stiff opposition from West Slope and environmental interests, in 1937 Congress authorized the Bureau of Reclamation to build the Colorado-Big Thompson (C-BT) Project.<sup>20</sup>

With 12 reservoirs, 35 miles of tunnels, and 95 miles of canals, construction of the C-BT Project would take nearly two decades. Project water was first diverted from Grand Lake to the East Slope in 1957, through the 13.1-mile Alva B. Adams Tunnel underneath Rocky Mountain National Park and the Continental Divide. Today, the C-BT is Colorado's largest transmountain diversion project, diverting approximately 213,000 acre-feet of water on average each year from the headwaters of the Colorado River to the South Platte River basin. Altogether the project provides supplemental water to thirty cities and towns and allows for the irrigation of roughly 693,000 acres of land in northeastern Colorado.

One of the issues that had to be resolved before Congress would authorize the C-BT Project was the potential impacts to water users on Colorado's West Slope.<sup>21</sup> While the West Slope was sparsely populated, agriculture was already well established, thanks largely to the earlier construction of two major irrigation projects by the Bureau of Reclamation.<sup>22</sup> West Slope residents had no intention of standing by as the headwaters of the Colorado River were diverted to the Front Range, initially demanding acre-foot for acre-foot compensation for any water taken from the Colorado River.<sup>23</sup> Eventually the two sides of the divide reached a compromise in the form of Green Mountain Reservoir, a component of the C-BT Project that was built as compensatory storage for existing and future West Slope water demands.<sup>24</sup> With a capacity of approximately 153,000 acre-feet, Green Mountain Reservoir provides enough storage to satisfy senior water rights in the Colorado River Basin, as well as an additional 20,000 acre-feet of water that the Bureau of Reclamation contracts out to West Slope water users.<sup>25</sup>

### **Later Compensatory Storage Projects**

With the agreement brokered for the C-BT Project as a model, in 1943 the Colorado General Assembly amended the Water Conservancy Act to make compensatory storage a requirement for any project exporting water from the Colorado River Basin that is owned or operated by a water conservancy district.<sup>26</sup> In the following decades, this compensatory storage requirement served as the foundation for the construction of additional transmountain diversion projects, both federal and nonfederal. In 1962 Congress authorized the construction of the Fryingpan-Arkansas Project, after West Slope interests and the Southeastern Colorado Water Conservancy District agreed to the construction of Ruedi Reservoir as the compensatory storage component of the project. Likewise in 1970 the Municipal Subdistrict for the Northern Colorado Water Conservancy District was permitted to construct the Windy Gap Project (a major expansion of the C-BT Project) after the Subdistrict agreed to provide financial support for the construction of Wolford Mountain Reservoir.<sup>27</sup>

However since the Water Conservancy Act only applies to water conservancy districts, just three of the nearly thirty transmountain diversion projects in Colorado are subject to the compensatory storage requirement (*see*

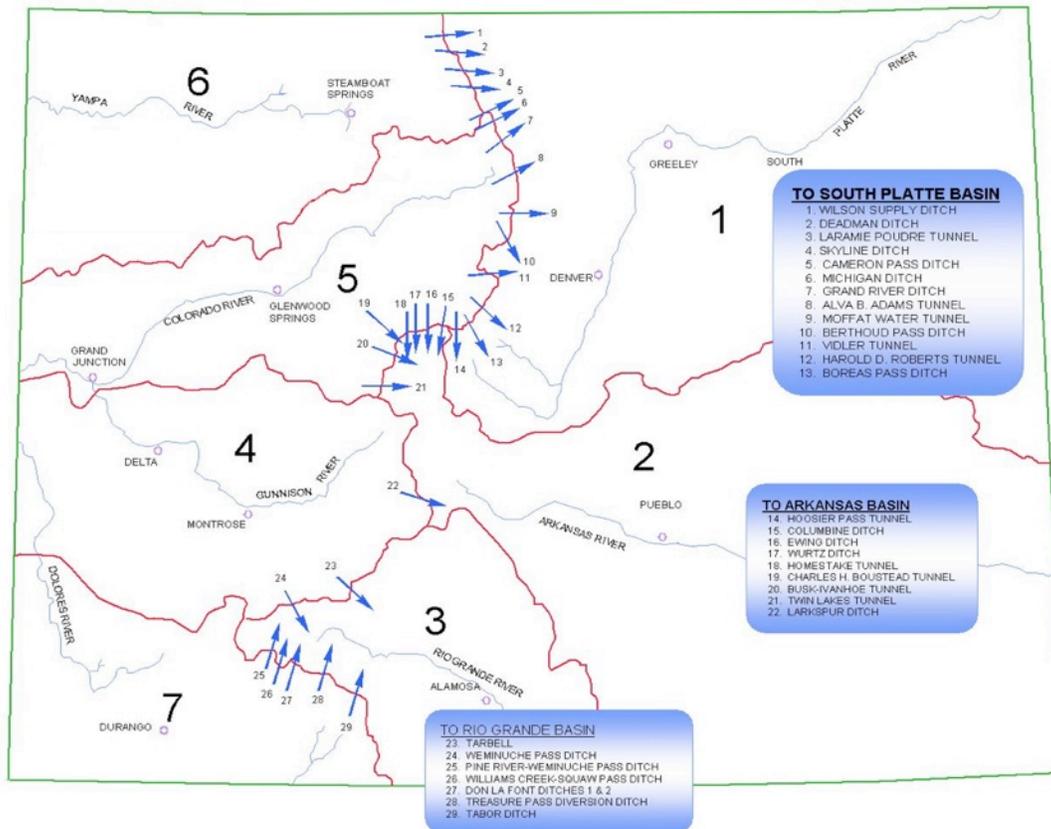


Figure 2. Transmountain diversions in Colorado. The only diversions subject to the compensatory storage requirement are those through the Adams Tunnel (8) (C-BT and Windy Gap projects) and the Boustead Tunnel (19) (Fryingpan-Arkansas Project). (State Engineers Office)

Figure 2).<sup>28</sup> The concept of compensatory storage is also increasingly limited as a tool for negotiation between East and West Slope water interests.<sup>29</sup> One of the main reasons for the diminished interest in compensatory storage is the reduced demand for additional water storage on the West Slope.<sup>30</sup> Numerous reservoirs on the West Slope already provide for the storage of spring runoff, and the availability of other feasible reservoir sites is limited.<sup>31</sup> Moreover, the West Slope is transitioning from a mining and agricultural based economy to one increasingly centered around tourism and second-home ownership, both of which value the environmental and recreational benefits provided by maintaining instream flows.<sup>32</sup>

### The Two Forks and Homestake II Projects

The potential roadblock that environmental and recreational interests pose to additional transmountain diversion projects was demonstrated by the relatively recent defeat of two major water supply projects for the Front Range. In 1990, after nearly fifty years of planning and more than \$40 million spent on various feasibility studies, the Environmental Protection Agency (EPA) vetoed Denver Water’s Two Forks Project, based on the potential impact to fisheries, wildlife, and recreational values.<sup>33</sup> Two years later, after more than two decades of fierce litigation, local interests in Eagle County also successfully defeated the Homestake II Project, again based on environmental concerns, in particular, the potential impacts to wetland areas in the recently-formed federal Holy Cross Wilderness Area.<sup>34</sup>

Both the Two Forks and Homestake II projects were ultimately defeated because their proponents failed to account for the impacts associated with transmountain diversions on environmental and recreational values in the basin-of-origin. While local environmental and recreational interests will never be paramount to the need to ensure

Figure 3. Population growth on the Front Range in the 20th century.

adequate water supplies for the growing Front Range, no longer can East Slope water providers simply make supply planning and development decisions based solely on cost alone.<sup>35</sup>

Yet the demise of the Two Forks and Homestake II projects represented more than just an increased emphasis on environmental and recreational interests. To fully understand the implications of these two projects, it is necessary to consider how they fit within the larger story of Colorado water law.

Colorado's unique approach to water law was originally tailored for mining and irrigation purposes. Yet for most of the twentieth century, as

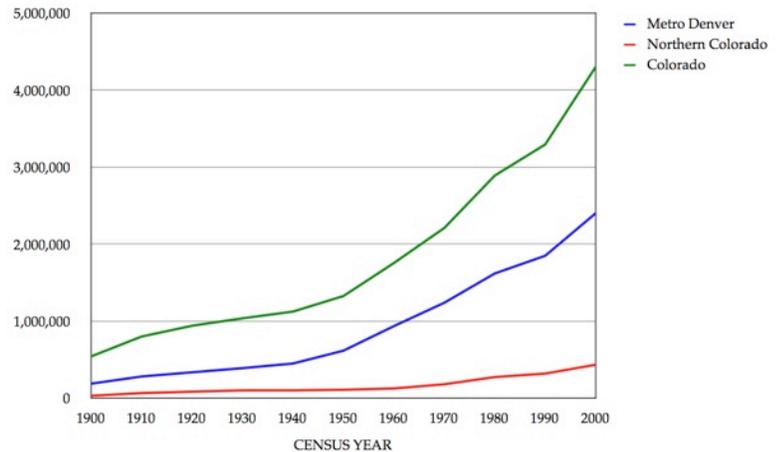
Colorado grew from a rural territory to an increasingly metropolitan state, water laws were refashioned to support nearly unlimited urban growth.<sup>36</sup> For example, in 1939, when the City of Denver sought judicial decrees for its West Slope water rights on the Fraser and Williams Fork rivers, the Colorado Supreme Court developed an exception to the traditional anti-speculation rule, thereby allowing municipalities to obtain conditional rights based on reasonably anticipated future water demands.<sup>37</sup> Similarly in 1969 the Colorado General Assembly enacted a statute that provides that foreign water, once diverted from its natural basin of origin, can be used to extinction, thereby making such water largely exempt from the prior appropriation system and allowing major water supply project developers to realize the maximum value of "developed" water through re-use and re-application.<sup>38</sup> As a result of these and other similar decisions and enactments, Front Range water providers were able to secure vast amounts of West Slope water for diversion to the East Slope.<sup>39</sup>

The demise of Two Forks and Homestake II reversed the course of water supply planning and development in Colorado, particularly for water providers on the Front Range. Eagle County's defeat of the Homestake II Project demonstrated the new found permitting power of local interests over proposed transmountain diversion projects.<sup>40</sup> With the authority conferred to counties and municipalities in House Bill 1041, Front Range water providers could no longer steamroll West Slope interests in developing additional transmountain water supplies.<sup>41</sup> Today, local permitting has the potential to pose as significant a hurdle for proposed transmountain diversion projects as any federal and state levels of review.

### Changing Water Supply Responsibilities on the Front Range

If Homestake II represented the decentralization of permitting authority over transmountain diversion projects, the demise of the Two Forks Project represented the decentralization of the planning authority over such projects, particularly with respect to Denver Water. Prior to EPA's veto of the Two Forks Project, suburban areas growing up around the City of Denver would often elect to be annexed into the city in order to obtain water supplied by Denver Water, and even areas that avoided annexation would still contract with Denver Water for their water supplies.<sup>42</sup> As the population on the Front Range exploded in the latter half of the twentieth century (see Figure 3), water planning was increasingly centered around Denver Water.

In the wake of the Two Forks veto, it became clear that Denver Water could no longer take responsibility for the water supply future of a rapidly expanding Denver metropolitan area.<sup>43</sup> As Denver Water's board of directors



*Metro Denver comprises Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson counties. Northern Colorado comprises Larimer and Weld counties. (Metro Denver Economic Development Corporation)*



Figure 4. In March of 2009, workers began pouring the foundation for the 10 million gallon Robertsdale Tank, a key component of the Prairie Waters Project. (Aurora Water)

finally concluded, there were too many political, legal, and economic constraints, and too few opportunities to develop significant new water supplies, for Denver Water to continue to plan for potentially unlimited population growth.<sup>44</sup> In 1993 Denver Water announced that it would no longer enlarge its service area, instead drawing a defined service area boundary.<sup>45</sup>

Denver Water's decision to limit its service area had widespread implications for other water providers on the Front Range. Most importantly, the decision meant that booming suburban areas excluded from Denver Water's service area would be forced to find water supplies for

themselves, without the option of relying on Denver Water's senior conditional West Slope water rights.<sup>46</sup> Without identifiable sources of water to meet projected future demands, Front Range communities have had to scramble to develop additional water projects, a challenging and expensive task in Colorado today. The City of Aurora, for example, is close to completing the \$754 million Prairie Waters Project, which will recycle used water from the South Platte River in order to boost the city's water supplies by some twenty percent (see Figure 4).<sup>47</sup> Similarly, the Parker Water and Sanitation District has begun construction on the Rueter-Hess Reservoir, with an expected capacity of roughly 77,000 acre-feet of water, some of which is expected to be recycled (though the district has yet to identify the source for a large portion of the reservoir's capacity).<sup>48</sup> These projects represent not only groundbreaking water conservation and reuse projects, but also the available options for municipalities seeking additional water in Colorado's ever-tightening water supply.<sup>49</sup>

The Two Forks veto also forced Denver Water to revise its overall strategy for developing additional transmountain water supplies. Not only did Denver Water recognize the need to pursue water projects in an environmentally responsible manner, but more importantly, it decided not to undertake any future transmountain diversion projects without first securing the cooperation of effected West Slope entities.<sup>50</sup> The need for such a cooperative approach to future water supply projects has since been recognized by other Front Range water providers.<sup>51</sup> Today water interests on the Front Range recognize that new transmountain diversion projects will only be built if they are mutually beneficial to both sides of the Continental Divide.<sup>52</sup>

### **The Windy Gap Firming Project, Moffat System Expansion and Other Current Project Proposals**

The negotiations surrounding the two most recent transmountain diversion proposals – the Municipal Subdistrict's Windy Gap Firming Project and Denver Water's Moffat System Expansion – demonstrate the level of cooperation required for such projects to survive beyond the conceptual stage. First, both projects follow the implementation of progressive water conservation measures on the East Slope, a step that West Slope interests have demanded occur before additional diversions are even considered.<sup>53</sup> Likewise, both projects employ existing facilities and infrastructure and previously decreed conditional water rights, which West Slope interests have also demanded.<sup>54</sup>

Yet the most important part of the Windy Gap Firming Project and Moffat System Expansion are the potential West Slope benefits currently being proposed as part of the projects. The Municipal Subdistrict and Denver Water have teamed up to offer a package of West Slope mitigation measures that would compensate for the impacts associated with both projects.<sup>55</sup> These measures include voluntary bypasses for transmountain diversion structures, as well as financial support for improved wastewater treatment and stream habitat restoration in the upper Colorado

River Basin.<sup>56</sup> Currently, West Slope interests are reviewing the proposal and negotiations are far from complete.<sup>57</sup> Yet the process that is unfolding promises a new chapter in water supply development for Colorado. As one Grand County commissioner said in reaction to the proposal, “Maybe West Slope and East Slope can work together for the good of Colorado.”<sup>58</sup>

The potential for additional transmountain diversions is a reality that West Slope interests must be prepared for. According to the most recent state estimates, Colorado’s population is expected to nearly double by 2050, requiring between 830,000 and 1.7 million acre-feet of additional water to meet municipal and industrial needs.<sup>59</sup> In addition to these “consumptive” demands, the Basin Roundtables are currently working to identify the “nonconsumptive” water needs (i.e., environmental and recreational needs) within their respective basins.<sup>60</sup> The Interbasin Compact Committee (IBCC) is attempting to identify a range of water supply development scenarios that can meet the state’s consumptive and nonconsumptive needs, and the various approaches rely on a mix of conservation, agricultural transfers, and new water supply development.<sup>61</sup>

Three major transmountain diversions are the current focus of planning efforts related to the Interbasin Compact Process – the Colorado River Return, the Yampa Pumpback, and the Flaming Gorge Pipeline.<sup>62</sup> The Colorado River Return, also known as the “Big Straw,” would pump water from the Colorado River at the state border back up the mainstem of the Colorado River to the Continental Divide, somewhere near Avon.<sup>63</sup> One route for the proposed pipeline would transect the Roaring Fork Valley, crossing through the Four-Mile Creek area.<sup>64</sup> The Yampa Pumpback would divert water downstream of Craig, pump the water upstream and through the North Platte River Basin, to be discharged into the Poudre River and the South Platte River Basin.<sup>65</sup> Finally, the Flaming Gorge Pipeline would carry water from the Green River and the Flaming Gorge Reservoir (in southwestern Wyoming) to Colorado’s Front Range.<sup>66</sup>

The IBCC is currently trying to develop a better idea of the feasibility of each project and the degree to which they could help address Colorado’s long-term water needs. The IBCC discussions could potentially lead to the authorization of one or more of these projects. The Interbasin Compact Process provides a structured means by which opposing interests can be identified and negotiations initiated at an early stage – to ensure that project proposals are not derailed. Thus, while transmountain diversion projects have never been more complicated or expensive, they also are again attainable. West Slope water interests must be vigilant to ensure that any future transmountain diversions are in the best interests of both the West Slope and the State of Colorado as a whole.

<sup>1</sup> See Cyrus Thomas, "Agriculture of Colorado," reprinted in Ferdinand V. Hayden, *Preliminary Field Report of the United States Geological Survey of Colorado and New Mexico*, Govt. Printing Office, 133-155 (1869).

<sup>2</sup> Carl Ubbelohde, Maxine Benson, and Duane A. Smith, *A Colorado History*, 56-62 (7th ed., Pruett Publ. Co. 1995)

<sup>3</sup> *Id.* at 65-66. (Two gold strikes that generated much of the attention were at Gold Hill, near the present-day City of Boulder, and Gregory Gulch, near Blackhawk.)

<sup>4</sup> *Id.* at 60, 62.

<sup>5</sup> See Thomas, *supra* n. 1 at 142 (noting that, as of 1869, roughly one-fifth of Colorado's population was engaged in farming, "But the one must draw the other – those who mine must eat – and the heavy expense of bringing food from the States is working out its own cure. The necessity for moving forward the agricultural interests of the country are being felt and acted on.") See also Thomas, *supra* n. 1 at 154 (estimating that Colorado's crop of 1869 included 675,000 bushels of wheat, 600,000 bushels of corn, 550,000 bushels of oats and barley, and 350,000 bushels of potatoes and other vegetables, which, when the hay and dairy product were included, had a potential market value of not less than \$3.5 million).

<sup>6</sup> *Id.* at 150 (noting that the practice of forming mutual ditch companies was widely employed, as it greatly reduced the cost of irrigating large areas of previously undeveloped lands).

<sup>7</sup> *Id.* at 140 (noting that "The troublesome factor in the great problem of the development of the agricultural capacity of the vast western plains is the supply of water. Furnish this, and the 'Great American Desert' of old geographers will soon become one mighty field of flowing grain. Furnish this, and the few other minor impeding factors will soon be eliminated.")

<sup>8</sup> See e.g., Frederick Haynes Newell, "Report on agriculture by irrigation in the western part of the United States at the Eleventh Census: 1890," U.S. Census Office (1894) (describing annual river calls on the Arkansas River, in Chaffee County (p. 104) and Fremont County (p. 110), as well as annual river calls on the South Platte River, in Jefferson County (p. 114)). See also Dick Wolfe, "Surface Water and Ground Water Administration in Colorado: Water 101," State Engineers Office (Feb. 24, 2004) (available at <http://water.state.co.us/pubs/presentations/wateradmin101.pdf>).

<sup>9</sup> Colorado is still grappling with what is commonly referred to as the "80-20" problem, which refers to the fact that roughly 80 percent of the state's population resides on the East Slope, where only 20 percent of the state's precipitation falls.

<sup>10</sup> Phyllis J. Perry, *It Happened in Rocky Mountain National Park*, Morris Book Publishing Co., 36 (2008). See also C. W. Buchholtz, *Rocky Mountain National Park: A History*, Colo. Assoc. Univ. Press (1983).

<sup>11</sup> Initially the ditch was called the "Grand River Ditch," but the name was changed in 1907, when the name of the Grand River was changed to the Colorado River.

<sup>12</sup> *Id.* at 37.

<sup>13</sup> The 14.3 mile-long Grand Ditch runs east from Baker Creek, at an elevation of about 10,300 feet, to La Poudre Pass, at an elevation of 10,179 feet, an average grade of less than 0.2 percent.

<sup>14</sup> The first transmountain diversion in Colorado occurred near Fairplay in 1860. Built for mining purposes, the ditch was shortly abandoned after local placer mining played out. The earliest transmountain diversion still in operation is the Ewing Ditch, constructed in 1880, which diverts water from the headwaters of the Eagle River to the Arkansas River Basin.

<sup>15</sup> Perry, *supra* n. 11 at 36.

<sup>16</sup> Roaring Fork Watershed Plan, "The State of the Roaring Fork Watershed Report," § 2.2.3 (Nov. 2008) (available at <http://www.roaringfork.org/sitepages/pid175.php>.)

<sup>17</sup> Peter D. Nichols, Megan K. Murphy, and Douglas S. Kenney, "Water and Growth in Colorado: A Review of Legal and Policy Issues," Natural Resources Law Center, Univ. of Colo. School of Law (2001).

<sup>18</sup> Robert Autobee, “Colorado-Big Thompson Project,” Bureau of Reclamation History Program (1996) (available at [http://www.usbr.gov/projects/Project.jsp?proj\\_Name=Colorado-Big%20Thompson%20Project&pageType=ProjectHistoryPage](http://www.usbr.gov/projects/Project.jsp?proj_Name=Colorado-Big%20Thompson%20Project&pageType=ProjectHistoryPage))

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* (The roadblock in Congress was Representative Edward T. Taylor, from Glenwood Springs, who was a member of the House Appropriations Committee and the former chair of the House Committee on Irrigation of Arid Lands.)

<sup>22</sup> The Bureau of Reclamation completed the Uncompahgre Project in 1912 and the Grand Valley Project in 1917, allowing for the irrigation of tens of thousands of acres in the Grand, Gunnison, and lower Uncompahgre valleys.

<sup>23</sup> See R. Autobee, *supra* n. 18. See also Steven Schulte, “HB 1177: Water War and (or) Peace?,” *Colo. Water*, 7 (Aug. 2005).

<sup>24</sup> This agreement was memorialized in the congressional authorization for the C-BT Project, known as “Senate Document 80.” The complete title of Senate Document 80 is “Synopsis of Report on Colorado Big Thompson Project, Plan of Development and Cost Estimate, prepared by the Bureau of Reclamation, Department of the Interior, 75th Congress, First Session, June 15, 1937.”

<sup>25</sup> Erik Kuhn, “Green Mountain Contracting Policy,” Memo to Board of Directors, Colo. River Water Conserv. Dist., Oct. 8, 2009 (available at <http://www.crvcd.org/media/uploads/20091020gm.pdf>).

<sup>26</sup> Colo. Rev. Stat. § 37-45-118(b)(II) (Lexis 2008) (requiring that the facilities of a water conservancy district must be designed, constructed, and operated in such manner that present appropriations and prospective uses of water within the Colorado River Basin “will not be impaired nor increased in cost.”)

<sup>27</sup> In 1979, the Colorado Supreme Court ruled that the Windy Gap Project had to comply with the Water Conservancy Act. *Colo. River Water Conserv. Dist. v. Mun. Subdist., N. Colo. Water Conservancy Dist.*, 610 P.2d 81 (Colo. 1979). The decision led to the 1980 Azure-Windy Gap Agreement whereby the proposed Azure Reservoir would serve as the compensatory component to the Windy Gap Project. In 1982, the Municipal Subdistrict proposed building a major pumpback project to satisfy its obligation to build the Azure Reservoir. After the Colorado River Water Conservation District, the Middle Park Conservancy District, and Grand County objected, the parties agreed to an Azure-Windy Gap supplemental agreement, whereby the Municipal Subdistrict provided the River District with \$10.2 million for the construction of Wolford Mountain Reservoir. See Erik Kuhn, “Historical Perspective for 2007,” *Colo. River Water Conserv. District* (Jan. 16, 2007).

<sup>28</sup> The three transmountain diversion projects subject to the compensatory storage requirement are the C-BT Project, the Windy Gap Project, and the Fryingpan-Arkansas Project.

<sup>29</sup> Nichols *et al.*, *supra* n. 17 at 42-43.

<sup>30</sup> This trend is not, however, certain to continue. While significant growth is projected for the Front Range, the West Slope, along the Colorado River mainstem in particular, is actually expected to grow at a faster rate. Municipalities, even more so than farms, require a high degree of certainty in their water supplies, necessitating water storage systems that can continue to provide a steady supply of water during droughts and the lower winter flows. Likewise, snowmaking often requires water during lower winter flows, which can also drive the demand for additional water storage. Yet, while the need for additional storage capacity is possible in the future, there is no *currently foreseeable* demand to justify new compensatory storage projects (see subsequent endnote).

<sup>31</sup> The three main compensatory storage reservoirs – Green Mountain, Ruedi, and Wolford Mountain – have excess capacity that is currently not under contract. The total amount of uncontracted water for each of these reservoirs is as follows: Green Mountain Reservoir, 10,289 acre-feet; Ruedi Reservoir, 16,700 acre-feet; and Wolford Mountain Reservoir, 20,000 acre-feet. This water is reserved for the future needs of the West Slope, and its availability counteracts any proposed additional compensatory storage.

<sup>32</sup> N.W. Colo. Council of Govts., “Job Generation in the Colorado Mountain Resort Economy: Second Homes and Other Economic Drivers in Eagle, Grand, Pitkin, and Summit Counties,” (Jun. 2004) (available at <http://www.nwc.cog.co.us/index.php/resources/nwccog-reports-studies/>)

<sup>33</sup> U.S. Env'tl. Protec. Agency, Region VIII, "Recommended Determination to Prohibit Construction of Two Forks Dam and Reservoir Pursuant to Section 404(c) of the Clean Water Act," (Mar. 1990) (EPA based its decision on the fact that "Construction and operation of the project would have unacceptable adverse effects on fishery areas (including spawning and breeding grounds), wildlife, and recreation areas. Furthermore, the record demonstrates the existence of practicable, environmentally less damaging alternatives to the proposed project.")

<sup>34</sup> See *City of Colo. Springs v. Bd. of Co. Commrs.*, 895 P.2d 1105 (Colo. App. 1994).

<sup>35</sup> Denver Water, "Water for Tomorrow: An Integrated Water Resource Plan," 4 (Feb. 2002) (noting that "In the era before environmental regulation, Denver Water's planning consisted largely of turning to the structural project that was least costly and highest-yielding to meet increased water demand") (available at <http://www.denverwater.org/SupplyPlanning/Planning/FutureWaterSupply/IntegratedResourcePlan/>).

<sup>36</sup> Dan A. Tarlock and Sarah B. Van de Wetering, "Growth Management and Western Water Law: From Urban Oases to Archipelagos," 5 *Hastings W.-N.W. J. of Env'tl. L. & Policy* 163, 172 (1999).

<sup>37</sup> *City and Co. of Denver v. Sheriff*, 105 Colo. 193, 202 (Colo. 1939) (holding that "it is not speculation but the highest prudence on the part of the city to obtain appropriations of water that will satisfy the needs resulting from a normal increase in population within a reasonable period of time.")

<sup>38</sup> Colo. Rev. Stat. § 37-82-106 (Lexis 2009). For a detailed history of the development of this provision, see *City of Thornton v. Bujou Irrigation Co.*, 926 P.2d 1 (Colo. 1996).

<sup>39</sup> See P. Nichols, *supra* n. 17 at 39-40.

<sup>40</sup> For further discussion, see section on House Bill 1041 and the Homestake II dispute in the main body of this report.

<sup>41</sup> See Geoffrey M. Craig, "House Bill 1041 and Transbasin Water Diversions: Equity to the Western Slope or Undue Power to Local Government?," 66 *U. Colo. L. Rev.* 791 (1995).

<sup>42</sup> Denver Water, *supra* n. 35 at 2.

<sup>43</sup> *Id.* at 2-3.

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> See Ed Marston, "Ripples grow when a dam dies," *High Country News* (Oct. 31, 1994) (quoting Chips Barry, Manager for Denver Water, on the changes to his organization's water policy in the wake of the Two Forks veto: "We won't solve the water supply problem for the Front Range. North Douglas County (Castle Rock, Parker, et al) doesn't have a water supply, and we're not going to provide one.")

<sup>47</sup> See *Prairie Waters Project website*, "Project Overview," (2007) (available at <http://www.prairiewaters.org/>).

<sup>48</sup> See U.S. Army Corps of Engrs., Omaha Dist., "Supplemental Environmental Impact Statement: Rueter-Hess Reservoir Expansion" (Nov. 2007).

<sup>49</sup> See e.g., Bruce Finley, "Parker water board recall fails," *Denver Post* (Dec. 17, 2009).

<sup>50</sup> Denver Water, *supra* n. 35 at 8.

<sup>51</sup> See George Sibley, "Colorado's Water for the 21st Century Act: Finally doing the right thing?," *Headwaters*, 7 (Spring 2009).

<sup>52</sup> For a current example of such negotiations, see Tonya Bina, "Grand County hopes to benefit from Front Range water-firming projects," *Sky-Hi Daily News* (Jan. 15, 2010).

<sup>53</sup> See Mun. Subdist., “Facts: The Windy Firming Project,” 1 (2009) (available at <http://www.chimneyhollow.org/Press.aspx>). Also see U.S. Army Corps of Engrs., Omaha Dist., “Draft Environmental Impact Statement: Moffat Collection System Project,” ES-2-4, 6 (Oct. 31, 2009) (available at <https://www.nwo.usace.army.mil/html/od-tl/eis/moffat-deis-docs.html>).

<sup>54</sup> *Id.* Regarding the West Slope’s position on transmountain diversion projects, see Colo. River Water Conserv. Dist., “Existing Transmountain Diversion Projects” (Jul. 15, 2008); see also Colo. River Water Conserv. Dist., “Transmountain Water Diversions” (Apr. 16, 2008) (both documents available at [http://www.crwcd.org/page\\_9](http://www.crwcd.org/page_9)).

<sup>55</sup> Mark Jaffe, “Colorado water war ends in deal,” *Denver Post* (May 1, 2009) (despite the article’s intimation, no deal has yet been struck). See also Denver Water, Citizens Advisory Comm., “CAC Minutes for Meeting of May 21, 2009” (May 21, 2009) (noting that the agreement is not yet formalized).

<sup>56</sup> *Id.*

<sup>57</sup> Color. River Water Conserv. Dist., “Minutes: Third Quarterly Meeting of the Board of Directors of the Colorado Water Conservation District,” 2-3 (July 21-22, 2009).

<sup>58</sup> As quoted in Jaffe, *supra* n. 55.

<sup>59</sup> Colo. Water Conservation Bd., “Draft Report – State of Colorado 2050 Municipal and Industrial Water Use Projections,” §§ 2.2 and 5.2 (Jun. 2009) (available at <http://cwcb.state.co.us/IWMD/COsWaterSupplyFuture/CosWaterSupplyFuture.htm>).

<sup>60</sup> Colo. Rev. Stat. § 37-75-105(2)(c) (Lexis 2008).

<sup>61</sup> See Colo. Water Conservation Bd., “Draft Report – Strategies for Colorado’s Water Supply Future” § 1.2.2 (2009)

<sup>62</sup> *Id.* at § 4.1.1.2.

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

## Appendix II: State Governmental Entities with Water-Related Authority

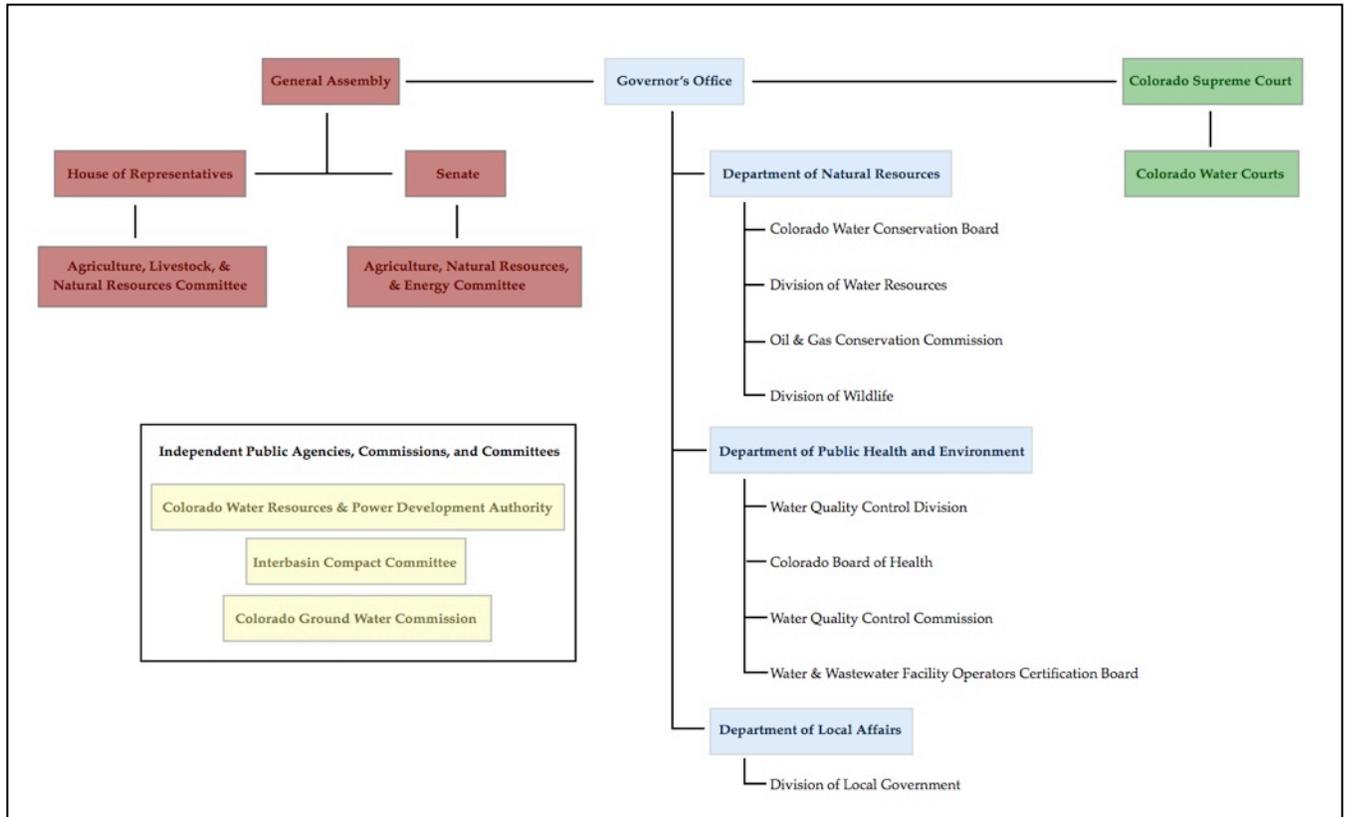


Figure 1. State governmental entities with water-related authority.

### I. GENERAL ASSEMBLY

#### A. House of Representatives

**Agriculture, Livestock, & Natural Resources Committee** – Serves as the committee of reference for all water-related legislation that is proposed in the State House of Representatives.

#### B. Senate

**Agriculture, Natural Resources, & Energy Committee** – Serves as the committee of reference for all water-related legislation that is proposed in the State Senate.

### II. GOVERNOR'S OFFICE

**A. Department of Natural Resources (DNR)** – The executive director of this department serves as the Director of Compact Negotiations for the Interbasin Compact Committee, chairman of the Colorado Oil and Gas Conservation Commission, and as a member of both the Colorado Ground Water Commission and the Colorado Water Conservation Board.

**1. Colorado Water Conservation Board (CWCB)** – CWCB was created in 1937 for the purpose of “aiding in the protection and development of the waters of the state.”<sup>1</sup> The board consists of 15 members, including

one representative for each of the eight major river basins in the state. CWCB functions under seven major program areas:

- a. **Water Information Section** – Provides water resource information to CWCB staff, water users and the general public, using data collected and tools developed under the CWCB’s Colorado’s Decision Support Systems.
  - b. **Water Supply Protection Section** – Protects the state’s ability to develop its entitlements under interstate compacts and equitable apportionment decrees.
  - c. **Stream and Lake Protection Section** – Manages and administers the state’s Instream Flow Program. The section is responsible for the appropriation, acquisition and protection of instream flow and natural lake level water rights to preserve and improve the natural environment to a reasonable degree.
  - d. **Flood Protection Section** – Administers the state’s Watershed Protection & Flood Mitigation Program. The section reviews and approves floodplain designations by local governmental entities, provides local jurisdictions with technical assistance and floodplain information, and provides assistance to entities in meeting the requirements of the National Flood Insurance Program.
  - e. **Water Supply Planning & Finance Section** – Promotes the wise and efficient development of Colorado’s limited water resources through the Water Project Loan Program and the Non-Reimbursable Project Investments Program.
  - f. **Office of Water Conservation and Drought Planning** – Promotes water use efficiency while providing public information and technical and financial assistance for conservation planning.
  - g. **Intrastate Water Management and Development Section** – Gathers information and formulates plans to address the gap between water demands and available supplies. The section supports the implementation of the Colorado Water for the 21st Century Act, and administers the Water Supply Reserve Account.<sup>2</sup>
2. **Division of Water Resources (State Engineer’s Office)** – Regulates the distribution of water according to priorities and quantities decreed by Colorado’s water courts. The agency maintains offices in the seven major river basins in the state (with the North Platte basin included as part of the White/Yampa division), with each office run by a division engineer. Every four years, division engineers publish a tabulation of all water rights in their respective divisions, reflecting such matters as abandonment and conditional decrees.
3. **Oil and Gas Conservation Commission (COGCC)** – Promotes the responsible development of Colorado’s oil and gas natural resources. With respect to water resources, COGCC’s regulations are intended to ensure that wells and other facilities are designed and constructed in order to protect ground water from contamination during oil and gas operations, based on water quality standards established by the Water Quality Control Commission (WQCC). Oil operations that involve discharges to surface waters are regulated under the WQCC’s permitting program, but several COGCC regulations are intended to prevent any non-permitted discharges.
4. **Division of Wildlife (DOW)** – Manages and regulates the conservation of Colorado’s wildlife, including the issuance of licenses and the enforcement of state hunting and fishing regulations. Additional responsibilities of the DOW include managing state wildlife areas, conducting research on wildlife management activities, providing technical assistance to private and public landowners, and developing programs to protect and recover threatened and endangered species. With respect to water resources, the DOW serves a support role in the implementation of the federal recovery plan for the four endangered fish species that inhabit the Colorado River system – the Colorado pikeminnow, razorback sucker, bonytail, and

humpback chub. The DOW is also responsible for consulting with the CWCB on proposed instream flow appropriations and acquisitions, as well as with local governments in regulating development activities in “significant wildlife habitats” containing endangered species, under the purview of House Bill 1041 (1974). Finally, under the COGCC’s 2009 rule amendments (enacted in pursuant to the Colorado Habitat Stewardship Act of 2007), oil and gas operators are required to consult with the DOW prior to conducting oil and gas operations in areas of sensitive wildlife habitat (as designated by the DOW), and in certain other circumstances.<sup>3</sup>

**B. Department of Public Health and Environment (CDPHE)<sup>4</sup>**

**1. Water Quality Control Division (WQCD)** – Implements and enforces water quality management standards, regulations, and policies established by the WQCC and the Board of Health, including the permitting program for any discharge to state waters. The WQCD must also approve the site location and design for the construction or expansion of any domestic wastewater treatment works. In addition, the WQCD also is responsible for actively sampling and monitoring of state waters.<sup>5</sup>

**2. Colorado Board of Health** – Adopts and revises the general policies for CDPHE’s administration and enforcement of the public health laws of the state. In addition, the Board of Health has the authority to adopt any rules, regulations, or standards necessary to administer and enforce the public health laws of the state. The Board of Health consists of nine members, with at least one member from each congressional district, who are appointed by the governor with the consent of the Senate.<sup>6</sup>

**3. Water Quality Control Commission (WQCC)** – Responsible for developing specific state water quality policies, in a manner that implements the broader policies set forth by the General Assembly in the Colorado Water Quality Control Act.<sup>7</sup> The Commission is responsible for adopting:

- general water quality classifications and standards for surface and ground waters;
- minimum general sanitary standards for drinking water systems;
- control regulations for compliance with water quality classifications and standards; and
- permitting regulations for any discharge into state waters.

In addition, the Commission is responsible for adopting guidelines for local regulations establishing minimum standards for the location, construction, and use of individual sewage disposal systems.<sup>8</sup>

**4. Water and Wastewater Facility Operators Certification Board** – Licenses operators of facilities that treat and manage drinking water and domestic sewage, under the Colorado Operators Certification Statute.<sup>9</sup>

**C. Department of Local Affairs (DOLA)** – Provides financial and technical assistance, emergency management services, property tax administration and programs addressing affordable housing and homelessness to local governments throughout Colorado.

**Division of Local Government** – Provides technical assistance and information to local governments, and acts as a liaison between other state agencies and local governments. Areas in which the Division of Local Government provides technical assistance include:

- budgeting and financial management;
- land use planning;
- special district elections;
- general government administration, purchasing, personnel; and
- water and wastewater management.

### III. JUDICIAL BRANCH

**A. Colorado Supreme Court** – The Supreme Court hears appeals from water courts, but only when it considers the cases to have great significance. The Supreme Court may also answer legal questions from the legislature regarding proposed laws.

**B. Colorado Water Courts** – The Water Right Determination and Administration Act of 1969 created seven water divisions in Colorado.<sup>10</sup> Each water division is staffed with a division engineer, appointed by the state engineer; a water judge, appointed by the Supreme Court; a water referee, appointed by the water judge; and a water clerk, assigned by the district court. Water courts have jurisdiction over the determination of water rights, petitions for changes of water rights, plans for augmentation, approvals of reasonable diligence in the development of conditional water rights, and all other water-related legal matters.

### IV. INDEPENDENT STATE AGENCIES, COMMISSIONS, AND COMMITTEES

**A. Colorado Ground Water Commission** – Manages and controls “designated” ground water resources within the state according to the Ground Water Management Act.<sup>11</sup> The commission has delegated several functions to the State Engineer, including the authority to issue conditional and final permits for large-capacity wells. Among the commission’s remaining responsibilities are the authority to designate ground water basins and ground water management districts, create and adopt rules and policies to assist in the administration of designated ground water, and review variance requests to the commission’s rules and policies.

**B. Interbasin Compact Committee (IBCC)** – Facilitates the process of interbasin compact negotiations between the nine basin roundtables established under the Colorado Water for the 21st Century Act.<sup>12</sup> The IBCC is comprised of twenty-seven members, including two representatives from each basin roundtable, and is lead by the Director of Interbasin Compact Negotiations, who is appointed by the governor. Under the Interbasin Compact Committee Charter, the IBCC has the authority to ratify legally-binding compacts and other agreements between roundtables.

**C. Colorado Water Resources and Power Development Authority** – Assists local governments with financing water and wastewater infrastructure through a number of specific programs the following:

- Drinking Water Revolving Fund;
- Small Hydropower Loan Program;
- Small Water Resources Projects Program;
- Water Pollution Control Revolving Fund; and
- Water Revenue Bonds Program.

The Colorado Water Resources and Power Development Authority is a political subdivision of the state, but is neither a state agency nor subject to the administrative direction of any department or agency of the state. The powers delegated to the authority are vested in a board of directors, comprised of representatives from the eight major river basins and the City and County of Denver who are appointed by the governor and confirmed by the senate.<sup>13</sup>

<sup>1</sup> Colo. Rev. Stat. § 37-60-102 (Lexis 2008).

<sup>2</sup> Colorado Water for the 21st Century Act, Colo. Rev. Stat. §§ 37-75-101 through 37-75-106 (Lexis 2008). For information on the WSR, *see* Colo. Rev. Stat. § 39-29-109(2)(c) (Lexis 2008).

<sup>3</sup> 2 Colo. Code Regs. 404-1, § 306(c) (2009). *See* Colo. Rev. Stat. § 34-60-128(3)(d)(I) (Lexis 2009). *See also* Colo. Oil & Gas Conserv. Comm., “Statement of Basis, Specific Statutory Authority, and Purpose,” 29-30 (Dec. 17, 2008).

<sup>4</sup> For more information on the CDPHE’s operations, including its recent reorganization, *see* Colo. Dept. of Pub. Health and Environ., “Strategic Plan: FY 2008-09” (available at <http://www.cdphe.state.co.us/ic/StrategicPlan.pdf>).

<sup>5</sup> For more information, *see* the Colorado Water Quality Control Act, Colo. Rev. Stat. §§ 25-8-101 through 25-8-703 (Lexis 2008).

<sup>6</sup> For more information, *see* the Colorado Drinking Water Quality Act, Colo. Rev. Stat. §§ 25-1.5-201 through 25-1.5-209 (Lexis 2008).

<sup>7</sup> Colo. Rev. Stat. §§ 25-8-101 through 25-8-703 (Lexis 2008).

<sup>8</sup> For more information on ISDS regulations, *see* the Individual Sewage Disposal Systems Act, Colo. Rev. Stat. § 25-10-101 through 25-10-113 (Lexis 2008).

<sup>9</sup> Colo. Rev. Stat. §§ 25-9-103 (Lexis 2008).

<sup>10</sup> Colo. Rev. Stat. §§ 37-92-101 through 37-92-602 (Lexis 2008).

<sup>11</sup> Colo. Rev. Stat. §§ 37-90-101 through 37-90-143 (Lexis 2008).

<sup>12</sup> Colo. Rev. Stat. §§ 37-75-101 through 37-75-106 (Lexis 2008).

<sup>13</sup> For more information, *see* the Colorado Water Resources and Power Development Authority Act, Colo. Rev. Stat. §§ 37-95-101 through 37-95-123 (Lexis 2008).

## Appendix III: Protecting Water Resources with Local Land-Use Authority

### Nonexempt Wells and Augmentation Plans

Even when groundwater wells are not exempt from state water rights administration, they can still have a significant impact on local stream flows. Wells that are subject to administration generally require an augmentation plan, approved by a water court, in order to prevent injury to senior water rights.<sup>1</sup> In the Roaring Fork Watershed, except on Four Mile Creek (see Figure 1), such augmentation plans are primarily intended to satisfy the “Cameo Call” – the call on the Colorado River and its tributaries on behalf of senior water rights that divert for irrigation and power purposes in the Grand Valley area near Grand Junction.<sup>2</sup>

A landowner needing an augmentation plan would likely contract with one of the two water conservancy districts in the watershed that are authorized to provide water for augmentation purposes – the Basalt Water Conservancy District and the West Divide Water Conservancy District (see Figure 2).<sup>3</sup> To prevent injury to the Cameo Call, an augmentation plan would most likely release water from either Ruedi or Green Mountain reservoirs, which represent the two primary sources of augmentation water for both districts.<sup>4</sup>

The problem with such an augmentation plan is that, while it may satisfy the Cameo Call, it can have a deleterious impact on local stream flows, depending upon the location of the groundwater withdrawals and the augmentation plan’s point of release. For example, an augmentation plan covering a nonexempt groundwater well in the Woody Creek area that requires releases from Ruedi Reservoir disregards the impact on streamflows between the point of withdrawal in Woody Creek and the confluence of the Roaring Fork and the Fryingpan rivers.

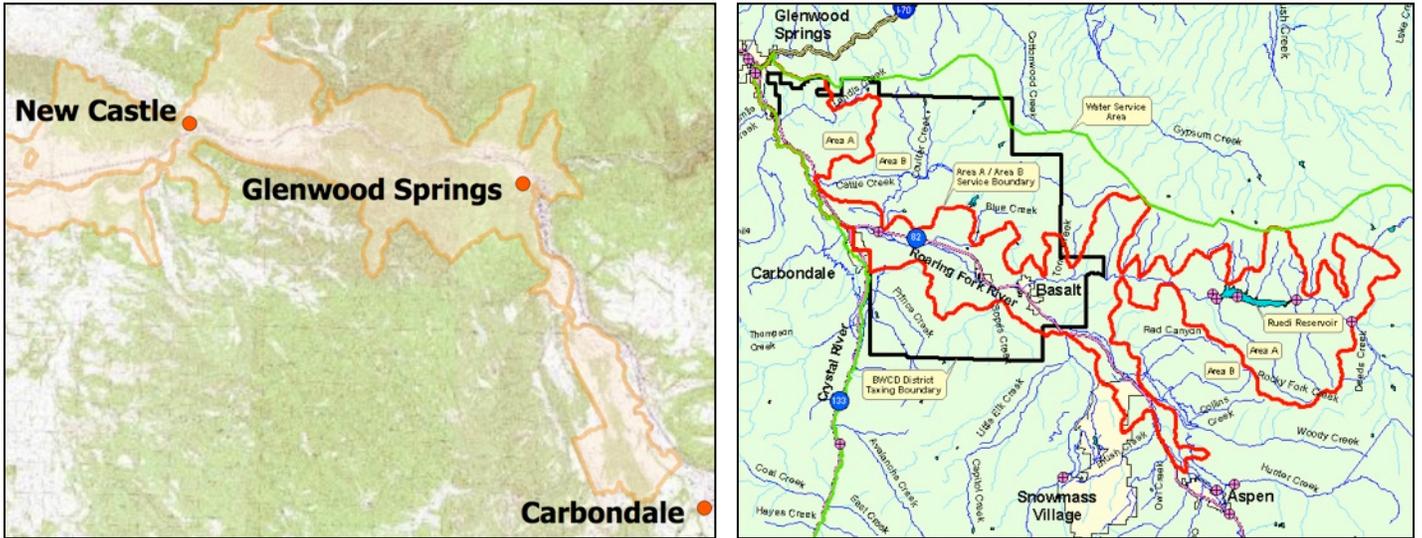
In reviewing proposed augmentation plans, water courts are primarily concerned about the potential effect on other water users.<sup>5</sup> A water court won’t be concerned with the environmental impacts of a proposed augmentation plan unless the plan could potentially cause legal injury to water rights held by the Colorado Water Conservation Board (CWCB) for instream flow purposes.<sup>6</sup> Yet augmentation plans do affect local streamflows, and local governments are in a position to account for such impacts through the local land-use permitting process. Local governments, for example, could investigate the imposition of exactions on landowners that want to use a nonexempt well to serve a proposed development in order to help fund local water protection measures, like Pitkin County’s water trust with the CWCB for instream flow purposes. Or local governments could simply require certain water efficiency measures for any development that will use a nonexempt well as a source of water. Regardless of how they do it, local governments should better account for the water-related impacts from both exempt and nonexempt wells, and ensure that developers account for their impact on local water resources.

### Well Permit Conditions

All well permits issued by the State Engineers Office, whether or not they are exempt from water rights administration, include specific restrictions and conditions on



Figure 1. Development on Four Mile Creek. Four Mile Creek is the only stream in the Roaring Fork Watershed where senior water rights require any new water development, such as groundwater wells, to secure an augmentation plan providing additional water for the local stream. Most other augmentation plans in the watershed are intended to satisfy senior water rights on the lower mainstem of the Colorado River. These augmentation plans generally use releases from Ruedi Reservoir, or even out-of-basin sources, such as Green Mountain Reservoir. The difference between the point of diversion and the point of augmentation water release may decrease local streamflows.



Figures 2 and 3. Service Areas of West Divide Water Conservancy District (left) and the Basalt Water Conservancy District (right). Within their defined service areas, the two districts provide new water users with court-approved augmentation plans, through releases from the districts' various sources of water, which include contracts with the Bureau of Reclamation for water deliveries from Ruedi and Green Mountain reservoirs.

the construction and use of the permitted well.<sup>7</sup> For exempt wells, state permits are generally limited to a rate of production of 15 gallons per minute (approximately 0.40 acre foot per year), and usually require that the withdrawn groundwater be returned to the local aquifer through some kind of non-evaporative septic and/or leachfield system.<sup>8</sup> Depending on the parcel served by the well, an exempt permit may be limited to household use only, excluding any outdoor use, and if the permit does allow for outdoor use, it is generally restricted to the irrigation of one acre or less of lawn and garden and provision of water for domestic animals and livestock.<sup>9</sup>

While the State Engineers Office diligently inspects completed wells, and often continues to monitor wells through metering, with tens of thousands of well permits issued in Colorado each year, the State's resources for reviewing permit compliance are necessarily limited.<sup>10</sup> Recent State audits have revealed that noncompliant use of permitted groundwater wells is a serious problem in Colorado, which often goes undetected under the current regulatory system.<sup>11</sup>

Local governments could fill this void by checking for permit compliance during the land-use review process, including the permitting process for private onsite wastewater treatment systems (which are often required to be used in conjunction with exempt wells). The State Engineers Office is committed to working with local governments during the dual permitting process for wells and onsite wastewater treatment systems, and will always accept information from local jurisdictions regarding the noncompliant use of a well.<sup>12</sup>

### Stormwater and Nonpoint Source Water Pollution Control

Nonpoint source water pollution is the result of surface and groundwater runoff moving through and across indiscrete terrestrial sources of pollution, including naturally occurring geologic formations, roads, construction sites, irrigated farmland, and other developed areas, before entering streams, lakes, and aquifers (for example, *see* Figure 4). Nonpoint source pollution includes sediments, pesticides and fertilizers, animal and pet waste, trash, motor oil, and any other natural or unnatural water contaminant. Today, nonpoint source water pollution is the largest remaining source of water pollution in the United States, and in the Roaring Fork Watershed.<sup>13</sup>

The Water Quality Control Division (WQCD) of the Colorado Department of Public Health and Environment (CDPHE) is responsible for regulating water quality in the state, under the auspices of the United States Environmental Protection Agency (EPA).<sup>14</sup> The WQCD's regulatory authority, however, is grounded primarily in a



Figure 4. The impacts from road maintenance. After 30 years of highway maintenance on I-70, Black Gore Creek, running parallel to the interstate on the west side of Vail Pass down to the Town of Vail, now shows the severe effects of sedimentation from thousands of tons of road traction sand washing into the creek each year. The Eagle River Watershed Council, State agencies, and other interests are working to address the problem. (Colo. Found. for Water Educ.)

mandatory permitting program for “point” source discharges, and is not designed to address the problem of nonpoint source pollution.<sup>15</sup> As nonpoint source pollution has become the singled greatest remaining threat to water quality, the EPA has been forced to rethink the traditional approach to water pollution control efforts.<sup>16</sup> Recognizing that nonpoint source pollution is fundamentally a problem of land-use management, the EPA has adopted a voluntary, cost-sharing program that helps fund local and regional stormwater and nonpoint source management efforts.<sup>17</sup> Like many water-related issues, nonpoint source pollution is a problem best addressed at the regional and local level.

Under federal law, nonpoint source pollution is primarily managed at the regional level (see inset), through what are known as “208 plans.”<sup>18</sup> Section 208 of the federal Clean

Water Act authorizes states to designate regional intergovernmental agencies for the purpose of developing “areawide waste treatment management plans,” which address, among other things, the identification and control of nonpoint sources of water pollution.<sup>19</sup> The governor of any state can elect to independently develop nonpoint source pollution controls, if statewide uniformity is determined to be necessary. For most of Colorado, the WQCD is responsible for developing regional plans.<sup>20</sup> But in the central mountains and along the Front Range, six regional agencies are responsible for developing section 208 plans, including the Northwest Colorado Council of Governments (NWCCOG), for the Roaring Fork Watershed.<sup>21</sup> The main advantage of a regional approach is that it accounts for the critical role local governments play in limiting nonpoint source pollution (via local land-use regulations and stormwater management), while still recognizing that this problem must be addressed uniformly at the watershed-level.

Through conventional land-use controls, local governments can help control nonpoint source water pollution from site-clearing for construction and development activities that disturb less than an acre of land (above this threshold, a stormwater discharge permit must be issued from the WQCD).<sup>22</sup> Local governments should also consider the potential nonpoint source pollution problems arising from the site-selection and design of roads, the total extent of impervious paved areas associated with development proposals, and any activities in geologically unstable areas.<sup>23</sup> By requiring building setbacks, use of erosion control measures, and special procedures for building in unstable areas, local governments can limit the cumulative water quality impacts from local land-use.

In addition to the land-use review process, local governments must also account for the nonpoint source pollution impacts associated with their own development and land-use activities, particularly as mandated by the Clean Water Act. As of 2001, cities in Colorado with populations over 10,000 must obtain a stormwater discharge permit from the WQCD covering all of

*What other entities share responsibility for nonpoint source water pollution control?*

The WQCD operates a nonpoint source management program, a non-regulatory program that primarily uses federal grants (under section 319 of the Clean Water Act) to implement voluntary nonpoint source pollution control projects.

The Colorado Nonpoint Source Council is a non-governmental entity, comprised of representatives from federal, state, and local agencies, as well as public and private interest groups. The Council advises the WQCD on grant requests for nonpoint source pollution control efforts.

In recent years, Colorado has annually received \$2 to \$2.5 million in federal grant funds for the nonpoint source management program. In the past, the State has directed this funding towards projects for the development and demonstration of best management practices (BMPs), but recent grants have focused on restoration projects in impaired water bodies.

Also within the CDPHE, the Colorado Board of Health sets state minimum standards and guidelines for onsite wastewater treatment systems. Additionally, the Colorado Water and Wastewater Facility Operators Certification Board licenses operators of facilities that treat and manage drinking water and sewage. (Colo. Found. for Water Educ.)

their stormwater discharges.<sup>24</sup> The permit requires cities to adopt and implement stormwater management programs addressing a range of activities, such as street sweeping, road deicing, construction ordinances and inspections, and control of illicit discharges.<sup>25</sup> These permits effectively require comprehensive stormwater infrastructural systems for the purpose of capturing and treating runoff from municipal streets. Currently, none of the municipalities within the Roaring Fork Watershed fall under the federal mandate for stormwater discharge permits; however, population projections show that local municipalities will not escape these requirements indefinitely.<sup>26</sup>

Among the more notable examples of local governments trying to address nonpoint source water pollution is the City of Aspen's 2007 "Clean River Initiative," a \$31 million, 15-year capital improvement plan to fund an ongoing stormwater management program.<sup>27</sup> Sediment is the major nonpoint pollutant discharged from Aspen's stormwater infrastructure, due to construction activities and road traffic within the city, as well as the proximity of Aspen Ski Mountain with its de-vegetated ski slopes and dirt access roads.<sup>28</sup> Recent monitoring showed that the Aspen stormwater system delivered up to twenty-times as much sediment as the national average for a comparable-sized city.<sup>29</sup> This type of excessive sedimentation can damage fish spawning habitat, impair fish food sources, alter streamflow patterns, and generally reduce aquatic biota.<sup>30</sup> Once implemented, Aspen expects the Clean River Initiative to reduce the total amount of sediment discharged into local rivers by 63 percent, from 2,850 tons of sediment per year to 1,054 tons.<sup>31</sup>

The major component of the Clean River Initiative is stormwater infrastructural improvements. As part of the planned improvements, the city constructed the Jenny Adair Wetlands, a manmade system of natural wetland features that, along with an adjacent stormwater vault, filters stormwater from Aspen's West End (see Figure 5).<sup>32</sup> In the first six months of operation, Aspen estimated that the project has saved 144 tons of sediment from entering the Roaring Fork River (approximately 80 tons of sediment were captured by the stormwater vault and 64 tons by the constructed wetlands).<sup>33</sup> Over the next decade, Aspen plans to construct similar wetland systems in different areas of the city, including one near Rio Grande Park, which will allow for treatment of runoff from Aspen Mountain and the city's downtown core.<sup>34</sup> Other structural features will be designed as the city completes master plans for other portions of the city (planning for the Smuggler/Hunter Creek area will begin sometime in 2011).<sup>35</sup>

Along with infrastructural improvements, the Clean River Initiative entails new regulations for construction and development activities, master planning, stormwater monitoring, and educational and outreach programs.<sup>36</sup> Funding for the program comes from a new development fees tied to impervious surface area developed or redeveloped, along with a voter-approved annual property tax.<sup>37</sup>

Aspen's Clean River Initiative is still in its early stages, with most of the actual construction yet to come, but it is already facing challenges. As a result of a downturn in construction activities, the development fee, estimated to generate \$900,000 annually, only brought in \$430,000 for the 2009 fiscal year; long-term projections are for only four percent annual growth from that figure.<sup>38</sup> Accordingly, Aspen has been forced to trim the program's budget by \$7 million, scaling back portions of the program related to flood control.<sup>39</sup> Yet the main stormwater improvements are still on track, so the program, despite the cutbacks, is still expected to significantly reduce the city's nonpoint source pollution.<sup>40</sup>



*Figure 5. Jenny Adair Wetlands. This manmade wetland system, comprising tens of thousands of native wetland plant species, saved 64 million tons of sediment from entering the Roaring Fork River in its first six months of operation. (ACES)*

## Due Diligence Requirements

In Colorado, a conditional water right is a right that grants a potential water appropriator the time necessary to complete their water supply project, while still preserving a priority date based on the commencement of the project.<sup>41</sup> However, to allow a potential water user to maintain a conditional water right indefinitely and without progress would frustrate the State's policy of promoting the maximum beneficial use of Colorado's water resources.<sup>42</sup> Accordingly, Colorado law makes conditional water rights contingent upon the owner's completion of the project with "reasonable diligence."<sup>43</sup> To fulfill this requirement, the owner of a conditional water right must file an application with the local water court for a finding of reasonable diligence once every six years.<sup>44</sup> Failure to file such an application results in abandonment and terminates the conditional water right.<sup>45</sup>

The measure of "reasonable diligence" is the steady application of effort to complete the conditional appropriation in a reasonably expedient and efficient manner given all the facts and circumstances.<sup>46</sup> Thus, in a reasonable diligence proceeding, the applicant must provide the water court with evidence of "continuous, project-specific effort directed toward the development of the conditional right commensurate with his capabilities." The court will consider all the relevant evidence in making its determination, including such factors as the size and complexity of the project, the applicant's economic capabilities, and the existence of any outside causes of delay in development.<sup>47</sup>

Despite carrying the burden of proof, the applicant is afforded a certain amount of leniency in a reasonable diligence proceeding. Neither current economic conditions beyond the control of the applicant which adversely affect the feasibility of the project, nor the fact that one or more governmental permits or approvals have not yet been obtained is alone sufficient to deny a diligence application.<sup>48</sup> This exception makes it possible for a conditional water right to persist for years, even decades, despite a project being no closer to completion.

Since conditional storage rights can have priority dates senior to existing absolute junior rights, if fully exercised, such conditional rights could adversely affect junior water rights holders.<sup>49</sup> Thus, the development of conditional water rights could have a significant impact on future water management, both at a statewide and local level.

Local governments should review and monitor due diligence proceedings to ensure that local water resources are protected. Similarly, during the land-use review process, local governments should consider the potential effect of the exercise of conditional water rights, as they negotiate with landowners regarding the appropriate development for a parcel.

<sup>1</sup> See Div. of Water Resources, Colo. Dept. of Nat. Resources, “Guide to Colorado well permits, water rights, and water administration,” (Jan. 2008) (available at <http://water.state.co.us/pubs/wellpermitguide.pdf>).

<sup>2</sup> See Roaring Fork Watershed Plan, “The State of the Roaring Fork Watershed Report,” § 2.1.1 (Nov. 2008) (available at <http://www.roaringfork.org/sitepages/pid175.php>).

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

<sup>5</sup> Colo. Rev. Stat. § 37-92-305(3)(a), (5), (8), and (12) (Lexis 2008). See also Colo. Rev. Stat. § 37-92-501.5 (Lexis 2008).

<sup>6</sup> *Id.*

<sup>7</sup> See Div. of Water Resources, *supra* n. 1

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> Email from Dwight Whitehead, Engineering Technician, Div. 5 (Colo. River Basin), Colo. Dept. of Water Resources, to G. Moss Driscoll, Atty., Elk Mt. Consult., LLC (available from author) (Jan. 8, 2010).

<sup>11</sup> Recent audits in Summit County by the Colo. State Engineers Office found a high incidence of noncompliant well use, resulting in ongoing inspections and a public education campaign. *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> See Colo. Found. for Water Educ., “Citizen’s Guide to Colorado Water Quality Protection,” 26 (2003) (available at <http://www.cfwe.org/flip/catalog.php?catalog=quality>). Regarding the Roaring Fork Watershed, see N.W. Colo. Council. of Govts., “2002 Roaring Fork Watershed Management Plan,” 33-34 (2002) (available at <http://www.nwcog.co.us/docs/wss/RFR02REV.final.pdf>).

<sup>14</sup> See Colo. Rev. Stat. § 25-8-202 (Lexis 2008). Note, though, that the WQCD implements rules, standards, and classifications set by the Colorado Water Quality Control Commission (WQCC). See Colo. Rev. Stat. § 25-8-205 (Lexis 2008).

<sup>15</sup> See Colo. Rev. Stat. § 25-8-205 (Lexis 2008). With respect to the State’s authority over nonpoint source pollution, note in particular subsection (5), which states that, “With regard to nonpoint source water pollution control related to agricultural practices, the [WQCC and WQCD] shall pursue incentive, grant, and cooperative programs in preference to the promulgation of control regulations....” See also Colo. Found. for Water Educ., *supra* n. 13 at 26.

<sup>16</sup> See Roaring Fork Watershed Plan, *supra* n. 2 at § 3.2.5.

<sup>17</sup> Colo. Found. for Water Educ., *supra* n. 13 at 26.

<sup>18</sup> *Id.* at 15.

<sup>19</sup> 33 U.S.C. § 1288(a) and (b)(2)(F)-(H) (authorizing and allowing for 208 plans to “identify, if appropriate,” agriculturally and silviculturally related nonpoint sources of pollution, mine-related sources of pollution, and construction activity-related sources of pollution, and to “set forth procedures and methods (including land use requirements) to control to the extent feasible such source [s].”

<sup>20</sup> *Id.* at (b)(4)(1) (stating that “Whenever the Governor of any State determines (and notifies the Administrator) that consistency with a statewide regulatory program under section 303 so requires, the requirements of clauses (F) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity through-out such State.” See also Colo. Found. for Water Educ., *supra* n. 13 at 15.

<sup>21</sup> Colo. Found. for Water Educ., *supra* n. 13 at 15. See also N.W. Colo. Council of Govts., “2002 NWCCOG Regional Water Quality Management Plan – Vol. 1 – Policy Plan,” 2 (available at [http://www.nwcog.co.us/docs/wss/RWQMP208\\_vol1policyplan.pdf](http://www.nwcog.co.us/docs/wss/RWQMP208_vol1policyplan.pdf)).

<sup>22</sup> See N.W. Colo. Council of Govts., *supra* n. 13 at 26.

<sup>23</sup> For more examples, see *id.* at 26-30.

<sup>24</sup> See Colo. Found. for Water Educ., *supra* n. 13 at 24-25.

<sup>25</sup> See *id.* See also Water Quality Control Div., Colo. Dept. of Pub. Health and Env., “Colorado’s Phase II Municipal Guidance,” 1 (Oct. 2001) (available at <http://www.cdph.state.co.us/wq/PermitsUnit/POLICYGUIDANCEFACTSHEETS/factsheets/ms4guide.pdf>).

<sup>26</sup> As of 2005, five municipalities had populations over five thousand – the City of Aspen (Jul. 2008, pop. 6,671), the Town of Carbondale (Jul. 2008, pop. 6,639), and the City of Glenwood Springs (Jul. 2008, pop. 9,026). Colo. Dept. of Local Affairs, “Municipalities within Counties, 2000 - 2008” (available at [http://www.dola.state.co.us/dlg/demog/pop\\_muni\\_estimates.html](http://www.dola.state.co.us/dlg/demog/pop_muni_estimates.html)). As for long-term growth, collectively, Eagle, Gunnison, Garfield, and Pitkin counties are expected to gain 113,144 new residents by 2030, though not all of these people would reside within the Roaring Fork Watershed. Colo. Water Conserv. Bd., “Statewide Water Supply Initiative,” appendix A (Nov. 2004) (available at <http://cwcb.state.co.us/IWMD/SWSITechnicalResources/SWSIPhaseIReport/SWSIPhaseIReport.htm>).

<sup>27</sup> See Aspen Area Community Plan, “State of the Aspen Area, Section 4 – Environmental Quality,” 150 (2008) (available at [http://www.aspencommunityvision.com/media/uploads/State\\_of\\_Aspen\\_Area\\_Report\\_sec\\_4.pdf](http://www.aspencommunityvision.com/media/uploads/State_of_Aspen_Area_Report_sec_4.pdf)).

<sup>28</sup> See Catherine Lutz, “Aspen’s runoff much higher than national average,” *Aspen Daily News* (Sept. 8, 2009).

<sup>29</sup> See Aspen Area Community Plan, *supra* n. 27 at 151.

<sup>30</sup> See Roaring Fork Watershed Plan, *supra* n. 2 at § 3.2.3.

<sup>31</sup> C. Lutz, *supra* n. 28.

<sup>32</sup> See Aspen Area Community Plan, *supra* n. 27 at 153.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.* See also Curtis Wackerle, “Low turnout expected in next week’s vote,” *Aspen Daily News* (Oct. 31, 2007).

<sup>35</sup> See Aspen Area Community Plan, *supra* n. 27 at 151.

<sup>36</sup> *Id.*

<sup>37</sup> *Id.* at 150.

<sup>38</sup> Carolyn Sackariason, “Quality of Aspen’s river water is latest victim of recession,” *Aspen Times* (Aug. 21, 2009). See also Curtis Wackerle, “City scales back flood control, keeps water quality measures,” *Aspen Daily News* (Aug. 18, 2009).

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> See Colo. Rev. Stat. § 37-92-103(6) (Lexis 2008).

<sup>42</sup> *Trans-County Water, Inc. v. C. Colo. Water Conserv.*, 727 P.2d 60, 65 (Colo. 1986).

<sup>43</sup> Colo. Rev. Stat. § 37-92-301(4)(a)(1) (Lexis 2008).

<sup>44</sup> *Id.*

<sup>45</sup> *Trans-County Water, Inc.*, 727 P.2d at 64.

<sup>46</sup> Colo. Rev. Stat. § 37-92-301(4)(b) (Lexis 2008).

<sup>47</sup> See *N. Colo. Water Assn. v. Three Peaks Water, Inc.*, 859 P.2d 836, 845 (Colo. 1993).

<sup>48</sup> Colo. Rev. Stat. § 37-92-301(4)(c) (Lexis 2008).

<sup>49</sup> Colo. Water Conserv. Bd., *supra* n. 26 at § 10.1.1.

## *Appendix IV: Local Governmental Entities with Water-Related Authority*

### **Municipal Corporations \***

- A. Counties
  - 1. County Public Improvement Districts
  - 2. County Local Improvement Districts
- B. Home Rule Counties
- C. Municipalities
  - 1. Water & Sewer Boards
  - 2. Municipal General Improvement Districts
  - 3. Municipal Special Improvement Districts
- D. Home Rule Municipalities

### **Quasi-Municipal Corporations \*\***

- A. Water Conservancy Districts
- B. Water Conservation Districts
- C. Irrigation Districts
- D. Conservancy Districts (Flood Control)
- E. Drainage Districts
- F. Internal Improvement Districts (Flood Control)
- G. Ground Water Management Districts
- H. Special Districts
  - 1. Metropolitan Districts
  - 2. Water Districts
  - 3. Water & Sanitation Districts
  - 4. Sanitation Districts
- I. Regional Service Authorities
- J. Metropolitan Water Districts
- K. Metropolitan Sewage Disposal Districts
- L. Power Authorities
- M. Water or Drainage Authorities

\* *Municipal corporation* – City, town, or other local political entity formed by charter from the state and having authority to administer the state’s local affairs.

\*\* *Quasi-municipal corporation* – Municipal corporation with limited authority and powers.

MUNICIPAL CORPORATIONS (by Type)	QUASI-MUNICIPAL CORPORATIONS (by County)	
<p><u>Counties (with Improvement Districts)</u></p> <ul style="list-style-type: none"> <li>• Eagle County</li> <li>• Garfield County</li> <li>• Gunnison County</li> <li>• Pitkin County               <ul style="list-style-type: none"> <li>- Pitkin County Energy Smart Local Improvement District</li> <li>- Redstone Ranch Acres General Improvement District</li> <li>- Twining Flats Road Improvement District</li> </ul> </li> </ul> <p><u>Municipalities (with Improvement Districts)</u></p> <ul style="list-style-type: none"> <li>• City of Aspen (Home Rule Municipality)</li> <li>• City of Glenwood Springs (Home Rule Municipality)               <ul style="list-style-type: none"> <li>- Glenwood Springs General Improvement District No. 1</li> </ul> </li> <li>• Town of Basalt (Statutory Town)</li> <li>• Town of Carbondale (Home Rule Municipality)</li> <li>• Town of Marble (Statutory Town)</li> <li>• Town of Snowmass Village (Home Rule Municipality)               <ul style="list-style-type: none"> <li>- Snowmass Village General Improvement District No. 1</li> </ul> </li> </ul>	<p><u>Eagle County</u></p> <ul style="list-style-type: none"> <li>• Basalt Sanitation District</li> <li>• Basalt Water Conservancy District</li> <li>• Colorado River Water Conservation District</li> <li>• Mid Valley Metropolitan District</li> <li>• Ruedi Shores Metropolitan District</li> </ul> <p><u>Garfield County</u></p> <ul style="list-style-type: none"> <li>• Basalt Water Conservancy District</li> <li>• Colorado River Water Conservation District</li> <li>• Mid Valley Metropolitan District</li> <li>• Roaring Fork Water &amp; Sanitation District</li> <li>• Spring Valley Sanitation District</li> <li>• West Divide Water Conservancy District</li> </ul> <p><u>Gunnison County</u></p> <ul style="list-style-type: none"> <li>• Colorado River Water Conservation District</li> </ul>	<p><u>Pitkin County</u></p> <ul style="list-style-type: none"> <li>• Aspen Consolidated Sanitation District</li> <li>• Aspen Highlands Commercial Metropolitan District</li> <li>• Aspen Highlands Residential Metropolitan District</li> <li>• Aspen Village Metropolitan District</li> <li>• Basalt Sanitation District</li> <li>• Basalt Water Conservancy District</li> <li>• Base Village Metropolitan District No. 1</li> <li>• Base Village Metropolitan District No. 2</li> <li>• Brush Creek Metropolitan District</li> <li>• Buttermilk Metropolitan District</li> <li>• Colorado River Water Conservation District</li> <li>• East Aspen Metropolitan District</li> <li>• Five Trees Metropolitan District</li> <li>• Gateway Metropolitan District</li> <li>• Holland Hills Metropolitan District</li> <li>• Redstone Water &amp; Sanitation District</li> <li>• Snowmass Water &amp; Sanitation District</li> <li>• Starwood Metropolitan District</li> <li>• W/J Metropolitan District</li> <li>• West Divide Water Conservancy District</li> <li>• White Horse Springs Water &amp; Sanitation District</li> </ul>

Figure 1. Local entities with water-related authority within the Roaring Fork Watershed. (Colo. Dept. of Local Affairs)

## Municipal Corporations

**A. Counties** (Colo. Rev. Stat. §§ 30-1-101 through 30-11-125) – Local subdivisions of the state government with boundaries designated by statute and governed by an elected board of county commissioners.

*General Authority.* Counties may exercise police power in order to ensure the health, safety and welfare of the public.<sup>1</sup> Counties, along with municipalities, also exercise “broad authority” over land use and development activities within their respective jurisdictions, in order to generally provide for the “planned and orderly use of land and protection of the environment.”<sup>2</sup>

*Water-Related Authority.*

- *Public Works.* Counties are authorized to “acquire, construct, maintain, add to, and improve” any public project, located either within or outside their jurisdiction, including facilities related to public water and sewer services.<sup>3</sup> Included under the definition of “public projects” are any facilities intended for use in the “conservation of natural resources.”<sup>4</sup> Counties may also exercise the right of eminent domain for work related to public water and sewer services, but only for “lands, easements, and rights in lands,” and not for the acquisition of water rights.<sup>5</sup>
- *Land Use Authority.* Counties can regulate the use of land strictly for flood control purposes.<sup>6</sup> Under House Bill (H.B.) 1141, enacted by the Colorado General Assembly in May of 2008, municipalities are required to determine, prior to granting any development permit, that an adequate water supply exists for the proposed development.<sup>7</sup> In addition, under H.B. 1041, counties are authorized to establish guidelines and regulations for managing areas and

activities of state interest, which includes the site selection and construction of major domestic water and sewage treatment system.<sup>8</sup>

- *Police Power.* For flood control purposes, counties can remove obstructions from any natural stream which causes a flood hazard.<sup>9</sup> This jurisdiction includes the right for a county to modify any existing diversion or storage structure, as long as neither the quality nor quantity of the water is altered.<sup>10</sup> Finally, for health purposes, a county board of health is authorized to develop specific regulations for individual onsite wastewater treatment systems, based on guidelines generated by the Colorado Water Quality Control Commission.<sup>11</sup>

**1. County Public Improvement Districts** (Colo. Rev. Stat. §§ 30-20-501 through 30-20-534) – Local taxing districts authorized by a county government for providing specific public services and infrastructural improvements.

*Formation.* Residents and property owners within a proposed county public improvement district must first submit a petition to the county board of commissioners for the district’s formation.<sup>12</sup> If the county board of commissioners determines that the proposed improvement or service will confer a general benefit on the district, and that the cost is not excessive compared to the value of the property in the district, the county board of commissioners can submit the decision to the residents and taxpayers in a special election.<sup>13</sup> After its formation, the board of county commissioners for the county in which the district is located automatically serve as the board of directors for the district.<sup>14</sup>

*General Authority.* Public improvement districts are authorized to “acquire, construct, maintain, add to, and improve” any public service or improvement that the county is authorized to provide under state law, with the exception of solid wastes disposal facilities and transfer stations.<sup>15</sup> To generate revenue for such improvements, a public improvement district can assess taxes against the land within the district, issue bonds, and charge rates and tolls for the services provided.<sup>16</sup>

*Water-Related Powers.* Under the authority granted to counties, public improvement districts can be formed for the purpose of acquiring, constructing, maintaining, and adding to sewer and water facilities, including improvements located outside the boundaries of the district.<sup>17</sup> While a public improvement district can exercise the power of eminent domain (like counties), for purposes of providing sewer and water facilities they are restricted to using this power only for the acquisition of “lands, easements, and rights in lands,” thus precluding its use for acquiring water rights.<sup>18</sup>

**2. County Local Improvement Districts** (Colo. Rev. Stat. §§ 30-20-601 through 30-20-628) – Local taxing districts authorized by a county government for the construction, installation, or acquisition of specific infrastructural improvements.

*General Authority.* Local improvement districts are essentially the same as county public improvement districts with one key distinction – local improvement districts are limited to the construction, installation, and acquisition of public infrastructural improvements; they have no operational authority.<sup>19</sup> Accordingly, construction is

supervised by the county's director of public works, and the district is dissolved once any debt incurred or bonds issued have been repaid.<sup>20</sup>

**B. Home Rule Counties** (Colo. Const. art. XIV, § 16; Colo. Rev. Stat. §§ 30-11-501 through 30-11-513; 30-35-101 to § 30-35-906) – Locally reorganized county governments structured to address the unique needs and circumstances of the particular jurisdiction.

*Formation.* Any existing county may reorganize as a home rule county, if a majority of the county's registered voters adopt a proposed home rule charter.<sup>21</sup> A proposed home rule charter can only be drafted by a specially elected charter commission, all meetings of which are required to be open to the public.<sup>22</sup>

*General Authority.* A home rule county must provide all the mandatory county functions, services, and facilities and exercise all mandatory powers required by law of non-home rule ("statutory") counties.<sup>23</sup> Similarly, home rule counties may elect to exercise and provide any discretionary powers, functions, services, and facilities that non-home rule counties are authorized to undertake, including the authority to create county public improvement districts and local improvement districts.<sup>24</sup> What distinguishes home rule counties from "statutory" counties is a relatively greater degree of freedom in devising the structure of county government.<sup>25</sup> Specifically, while statutory counties have government structures that are narrowly defined in the state constitution, home rule counties are "largely freed from these constitutional dictates."<sup>26</sup> Thus, if provided for in its charter, a home rule county is free to institute any system of governmental organization and structure intended to address the county's unique needs and circumstances.<sup>27</sup> In addition, Colo. Rev. Stat. § 30-35-201 grants home rule counties numerous specific powers above and beyond those granted to statutory counties.<sup>28</sup>

*Water-Related Authority.* Colo. Rev. Stat. § 30-35-201 authorizes home rule counties to: (a) construct viaducts, tunnels, wells, cisterns, reservoirs, and sewer systems, including facilities outside the county's limits; (b) lease or purchase canals and ditches; (c) purchase water and water rights, including any land connected with such rights; and (d) grant franchises to private individuals and companies for the provision of public water services.<sup>29</sup> However, even though home rule counties have the authority to purchase water rights, no state statute specifically grants home rule counties the power to condemn water rights, with the sole exception of the City and County of Denver, to which such authority is granted by article XX of the Colorado Constitution.<sup>30</sup> Also, even though home rule counties have the authority to construct and acquire water facilities beyond their jurisdictional limits, Colorado law requires home rule governments to comply with local permitting requirements.<sup>31</sup>

**C. Municipalities** (Colo. Rev. Stat. §§ 31-1-101 through 31-35-712) – Local governments organized by residents of formally unincorporated territories.<sup>32</sup>

*Types of Municipalities.* Municipalities are classified as either towns or cities, each with distinct governing structures. Towns have a population of less than 2,000 people and are governed by a mayor and a board of trustees.<sup>33</sup> Cities are governed by a city council with either a mayor or city manager responsible for enforcing city ordinances and keeping the peace.<sup>34</sup>

*General Authority.* Municipalities may exercise their police power in order to ensure the health, safety and welfare of the public.<sup>35</sup> As with counties, municipalities also exercise “broad authority” over land use and development activities within their jurisdictions, in order to generally provide for the “planned and orderly use of land and protection of the environment.”<sup>36</sup>

*Water-Related Authority.*

- *Public Works.* Municipalities have the authority to construct and maintain public water and sewer systems, including reservoirs and water collection facilities, both within and outside the municipality’s territorial limits.<sup>37</sup> In order to ensure an adequate water supply, municipalities may take water in “sufficient quantity ... from any stream, creek, gulch, or spring in this state,” including for anticipated needs as far as fifteen years in the future.<sup>38</sup> If a municipality’s acquisition of water rights materially interferes with or impairs vested water rights within the basin of origin, the municipality is required to either negotiate for the purchase of or condemn such rights.<sup>39</sup> The authority of municipalities to condemn water rights is somewhat constrained by the Water Rights Condemnation Act, which provides a set of restrictions and requirements for such procedures.<sup>40</sup> For instance, municipalities do not have the authority to condemn water rights that are already appropriated to a prior public use.<sup>41</sup> And before acquiring any water right through eminent domain, an independent commission formed by the municipality must first determine the acquisition to be of public necessity.<sup>42</sup> Once constructed, Municipalities gain unique jurisdictional authority over an area extending five miles above the point of diversion for their water supply collection facilities, wherein they can enact ordinances and regulations necessary to maintaining and protecting the system from injury and the water from pollution.<sup>43</sup>
- *Land-Use Authority.* Municipalities can regulate the use of land strictly for flood control purposes.<sup>44</sup> Under H.B. 1141, municipalities are required to determine, prior to granting any development permit, that an adequate water supply exists for the proposed development.<sup>45</sup> In addition, under H.B. 1041, municipalities are authorized to establish guidelines and regulations for managing areas and activities of state interest, which includes the site selection and construction of major domestic water and sewage treatment systems.<sup>46</sup> Finally, for flood control purposes, municipalities can regulate and restrict land use activities within storm or floodwater runoff channels or basins.<sup>47</sup>

1. **Water & Sewer Boards** (Colo. Rev. Stat. §§ 31-35-501 through 31-35-514) – Nonpolitical legislative bodies within municipal governments to which the city council or town board of trustees have specifically delegated the municipality’s authority over sewer and water services.<sup>48</sup>

*General Authority.* Water & sewer boards are vested with all the powers, rights, privileges, and duties that are conferred upon a municipal government for the purpose of providing sewer and water services.<sup>49</sup> This authority includes the ability to independently “acquire, improve, equip, relocate, maintain, and operate” sewer and water facilities on behalf of the municipality.<sup>50</sup> Water & sewer boards also have the power to condemn water rights and real property outside the municipality’s jurisdiction for the purpose of ensuring sufficient water supplies.<sup>51</sup>

2. **Municipal General Improvement Districts** (Colo. Rev. Stat. §§ 31-25-601 through 31-25-633) – Local taxing districts authorized by a municipality to provide specific public services and infrastructural improvements.

*Formation.* Municipal public improvement districts are in structure and organization, very similar to county public improvement districts. Residents and property owners within a proposed municipal public improvement district must first submit a petition to the governing body of the municipality for the district's formation.<sup>52</sup> If the municipality's governing body determines that the proposed improvement or service will confer a general benefit on the district, and that the cost is not excessive compared to the value of the property in the district, the governing body can call a special election, in which the residents and taxpayers of the proposed district can create the district by majority vote.<sup>53</sup> If approved by voters, the governing body for the municipality in which the district is located automatically serves as the board of directors for the district.<sup>54</sup>

*General Authority.* Public improvements district are authorized to acquire, construct, install, operate, or maintain any public service or improvement that the municipality is itself authorized to provide under state law, with the exception of solid wastes disposal facilities and transfer stations.<sup>55</sup> To generate revenue for such improvements, a public improvement district can assess taxes against the land within the district, issue bonds, and charge rates and tolls for the services provided.<sup>56</sup>

**3. Municipal Special Improvement Districts** (Colo. Rev. Stat. §§ 31-25-501 through 31-25-542) – Local taxing districts authorized by a municipality for the construction, installation, or acquisition of specific public improvements.

*Formation.* Formation of a special improvement district can be initiated either by public petition, or, in the case of water mains, sewers, and sewage disposal works, by a resolution passed by the municipality's governing body.<sup>57</sup> The governing body is then required to issue a preliminary order detailing the plans and specifications for the proposed improvement, and identifying the property to be assessed and the approximate cost each assessment unit will be required to assume.<sup>58</sup> The final step is a public hearing at which the governing body can authorize the district by ordinance or resolution.<sup>59</sup> A public petition can be denied, however, if the governing body deems the petition inadequate, or a majority of the residents and taxpayers of the proposed district publically oppose the measure at the hearing.<sup>60</sup>

*General Authority.* Local improvement districts are limited solely to the construction, installation, and acquisition of public infrastructural improvements; they have no operational authority.<sup>61</sup> Public improvements are required to be constructed under the direction of the municipal engineer or the municipality's governing body.<sup>62</sup>

**D. Home Rule Municipalities** (Colo. Const. art. XX; Colo. Rev. Stat. §§ 31-1-201 through 31-2-225) – Locally organized forms of municipal government that exercise autonomous authority over matters strictly of local and municipal concern under article XX of the Colorado Constitution.

*Formation.* Only municipalities with a population of at least 2,000 residents can become a home rule municipality.<sup>63</sup> For qualifying municipalities, reorganization as a home rule municipality requires the adoption of a proposed home rule charter by a majority of the municipality's registered voters.<sup>64</sup> A proposed home rule charter can only be drafted by a specially elected charter commission, all the meetings of which are required to be open to the public.<sup>65</sup>

*General Authority.* All the powers available to non-home rule municipalities are also available to home rule municipalities, including the authority to establish water and sewer boards, municipal public improvement districts, and special improvement districts.<sup>66</sup> What makes home rule municipalities unique is that they have the right to exercise autonomous authority over matters strictly of local and municipal concern.<sup>67</sup> Thus, any ordinances enacted by a home rule municipality, made pursuant to its charter and concerning strictly local matters, supersede any conflicting state laws.<sup>68</sup>

*Water-Related Authority.* While home rule municipalities have the right to exercise autonomous authority over local and municipal matters that are strictly of local concern, home rule municipalities, like home rule counties, are not exempt from complying with local permitting requirements authorized by state law when constructing or acquiring water works outside of their jurisdiction.<sup>69</sup>

## **Quasi-Municipal Corporations**

- A. Water Conservancy Districts** (Water Conservancy Act, Colo. Rev. Stat. §§ 37-45-101 through 37-45-153) – Locally organized governmental districts created to promote the development, use, and conservation of Colorado’s water resources through the planning, acquisition, and construction of water works and related facilities.

*Formation.* Water conservancy districts may be formed by petition to the local state district court signed by a specific number or percentage of the owners of irrigated and non-irrigated land within a proposed district.<sup>70</sup> Municipalities with populations greater than 25,000 residents must formally consent to being included within a proposed water conservancy district.<sup>71</sup> As an alternative procedure, a petition to the court can request an election on the organization of a water conservancy district.<sup>72</sup> If the requirements for either procedure are met, the local district court will appoint a board of directors to serve as the governing body of the district.<sup>73</sup> After the formation of a water conservancy district, the landowners of a particular area within the district may petition for the formation of a “subdistrict” in order to raise additional revenue for the planning, acquisition, and operation of water infrastructure, the authority over which will be retained by the board of directors for the larger district.<sup>74</sup>

*Water-Related Authority.*

- *Public Works.* Water conservancy districts have the authority to acquire, construct, and operate water facilities, both within and outside their jurisdiction, for the purpose of providing water within their jurisdiction.<sup>75</sup> Water conservancy districts can contract with the federal government for the construction and operation of such facilities.<sup>76</sup> Water conservancy districts are also expressly authorized to appropriate and acquire water rights from anywhere in the state.<sup>77</sup> Yet while water conservancy districts are endowed with the power of eminent domain for the condemnation of private property, including water rights, this power does not include the right to acquire the title to vested water rights for transmountain diversion.<sup>78</sup> Nor can water conservancy districts transport through a transmountain diversion water that has been acquired by any municipality by means of eminent domain.<sup>79</sup>
- *Compensatory Storage.* Though water conservancy districts are endowed with wide ranging powers, one provision of the Water Conservancy Act significantly restricts the ability of such districts to develop transmountain

diversions.<sup>80</sup> Specifically, facilities of a water conservancy district that export water from the Colorado River Basin must be designed, constructed, and operated in such a manner that present appropriations and prospective uses of water within the Colorado River Basin “will not be impaired nor increased in cost.”<sup>81</sup> This provision has effectively required conservancy districts to incorporate into any transmountain diversion project additional storage reservoirs on the West Slope in order to provide “compensatory storage” of water for use within the Colorado River Basin.<sup>82</sup>

- *Water Use.* Water conservancy districts are authorized to “provide, sell, lease, and deliver” water for any beneficial use within their jurisdiction, and to derive revenue and benefits from the provision of such services.<sup>83</sup> Specifically, water conservancy districts can operate a water activity enterprise in order to charge rates for water services, as well as to tax landowners whose land is benefitted by the provision of water services.<sup>84</sup>

**B. Water Conservation Districts** (Colo. Rev. Stat. §§ 37-46-101 through 37-50-142) – There are four regional governmental entities individually established by statute with considerable authority over the conservation, use, and development of water resources in their respective watersheds:

- *Colorado River Water Conservation District* – for the Colorado River and its tributaries, including the Eagle, Roaring Fork, Yampa, White, and Gunnison rivers.
- *Southwestern Water Conservation District* – for the San Juan and Dolores rivers and their respective tributaries, including the San Miguel and Piedra rivers.
- *Rio Grande Water Conservation District* – for the Rio Grande River and its tributaries, including the Conejos and Alamosa rivers.
- *Republican River Water Conservation District* – for the Republican River and its tributaries, as well as the portion of the Ogallala Aquifer underlying the district.

*Structure and Organization.* Each of the four districts are governed by a board of directors comprised of members appointed by each of the counties within the respective conservation district.<sup>85</sup> With the exception of the Republican River Water Conservation District, the districts have the authority to form local improvement districts, or “subdistricts,” if specific water infrastructural projects will benefit a particular area within their respective jurisdictions.<sup>86</sup> Similarly, all districts may form “joint action entities” with cooperating governments, which can serve as separate governmental bodies for the planning, construction, acquisition, and operation of water supply projects.<sup>87</sup>

*Water-Related Authority.*

- *Water Planning.* One of the primary objectives of each of the districts is to “safeguard for Colorado, all waters to which the state of Colorado is equitably entitled,” particularly with respect to the various interstate compacts that apportion water resources within the districts.<sup>88</sup> Thus, each of the water conservation districts has the authority to conduct surveys and investigations to determine the available water supply within their respective districts, and the “best manner of utilizing” any unappropriated water resources.<sup>89</sup> In response to such information, the districts also have the authority to initiate appropriations of water “for use and benefit of the ultimate appropriators,” and to “do and perform all acts and things necessary or advisable to secure and insure an adequate supply of water, present and future, for irrigation, mining, manufacturing, and domestic purposes” within their respective districts.<sup>90</sup> In addition, for the three water conservation districts that have the authority to form “subdistricts,” the board of directors may allocate available water to particular areas within the district, either by formal resolution or through the allocation of resources to particular subdistricts.<sup>91</sup>

- *Public Works.* In order to develop the water supplies of their respective watersheds, water conservation districts have the authority to form water activity enterprises for the construction and acquisition of water storage works, either independently or in cooperation with the federal government, the state, or other political subdivisions of the state.<sup>92</sup> Such facilities may be located anywhere in the district, or on vacant public lands anywhere in the state.<sup>93</sup> For construction of such facilities and infrastructure, the water conservation districts may exercise the power of eminent domain; however, such power is limited to private property and does not include the ability to condemn decreed water rights.<sup>94</sup> The districts also have the authority to enter into joint operating or service contracts with any political subdivision of the state.<sup>95</sup> Finally, the water conservation districts are given liberal authority in contracting with public and private parties in carrying out their general objectives, allowing for programs like the Colorado River Water Conservation District’s grant program, which provides up to \$150,000 in financial assistance for infrastructural projects that will develop new water supplies within its boundaries.<sup>96</sup>
- *Water Use.* Water conservation districts have the authority to charge water users through their respective water activity enterprises, as well as to levy taxes against landowners whose property is benefited by the provision of water services.<sup>97</sup> The Republican River Water Conservation District and the Rio Grande Water Conservation District are given added authority to impose a “use fee” on any diversion of water from steams and aquifers within these districts.<sup>98</sup> Similarly, the Colorado River Water Conservation District, the Southwestern Water Conservation District, and the Rio Grande Water Conservation District are authorized, under the police power, to adopt and enforce any reasonable rules, regulations, and orders pertaining to water supply services and related facilities, either public or private, if such activities directly or indirectly affect the activities of the district.<sup>99</sup>
- *Instream Flows.* Included within the list of enumerated powers for the Colorado River and Southwestern Water Conservation Districts is the authority to “file upon and hold for the use of the public sufficient water of any natural stream to maintain a constant stream flow in the amount necessary to preserve fish.”<sup>100</sup>

**C. Irrigation Districts** (Irrigation District Laws of 1905 and 1921, Colo. Rev. Stat. §§ 37-41-101 through 37-44-149) – Locally organized governmental entities created for the purpose of constructing, acquiring, and operating irrigation works.

*Formation.* The organization of an irrigation district first requires the majority of landowners, collectively owning a majority of the acreage in a proposed district, to sign a petition that is then presented to the board of county commissioners for the county within which the proposed district or the greater part thereof, lies.<sup>101</sup> The petition must include a description of the irrigation works that the proposed district is expected to provide if ultimately organized.<sup>102</sup> If the petition contains the requisite information and number of signatures, the board of county commissioners will then submit the question of the proposed district’s organization to a special election, in which only owners of “agricultural” land within the proposed district are qualified to vote.<sup>103</sup> If a majority of qualified voters consent to the formation of the proposed irrigation district, a second election will be held to appoint three directors to serve as the governing board for the district.<sup>104</sup>

*Water-Related Authority.* Irrigation districts have the authority to “construct, acquire, purchase, or condemn” any irrigation works, water rights, rights-of-way, or any “other property necessary for the use of the district.”<sup>105</sup> Thus, irrigation districts are provided with relatively broad eminent domain authority, including the ability to condemn water rights outside their respective jurisdictions.<sup>106</sup> However, before an irrigation district can condemn property valued at more than \$20,000, including water rights, the final decision on whether or not to acquire such property must first be submitted to qualified voters within the district.<sup>107</sup> Other powers for irrigation districts include the

ability to levy taxes against property within the district, issue bonds, and sell and lease excess water to land either within or outside the jurisdiction.<sup>108</sup> Irrigation districts are also authorized to contract with the federal government for the construction and operation of irrigation works.<sup>109</sup>

**D. Conservancy Districts (Flood Control)** (Colo. Rev. Stat. §§ 37-1-101 through 37-8-101) – Locally organized districts created principally for protecting private and public property from flooding.

*Formation.* Conservancy districts may be established by a petition submitted to a local district court and signed by either a certain number of landowners within the proposed district, or by the governing bodies of the local governments in which the district is proposed to be formed.<sup>110</sup> The petition must identify the boundaries of the proposed district and provide a general description of the improvements contemplated to be constructed or acquired by the district.<sup>111</sup> If the petition includes the requisite information and signatures, the court will order the proposed district’s organization, and appoint three residents of the district to serve as the initial board of directors for the district.<sup>112</sup>

*Water-Related Authority.* Conservancy districts are authorized to “clean out, straighten, widen, alter, deepen, or change the course or terminus of any ditch, drain, sewer, river, watercourse, pond, lake, creek, or natural stream,” even if the water course is outside the district’s boundaries.<sup>113</sup> Conservancy districts may also construct and acquire necessary facilities for preventing flooding, such as ditches, canals, levees, dikes, dams, reservoirs, floodways, and pumping stations.<sup>114</sup> Such public works may also be used for the “conservation, development, utilization, and disposal of water” for any beneficial purpose, as long as the principal purpose of the project is flood control.<sup>115</sup> In general, conservancy districts are authorized to acquire, including through eminent domain, any public or private property necessary to prevent flooding and related property damage.<sup>116</sup> However, while conservancy districts have the authority to acquire water rights through eminent domain, these entities have no power to “regulate or administer water rights or to take or damage such water rights, except upon payment of compensation.”<sup>117</sup>

**E. Drainage Districts** (Colo. Rev. Stat. §§ 37-20-101 through 37-33-109) – Locally organized districts created for the construction and acquisition of drainage systems within agricultural lands.

*Formation.* Organization of a drainage district may be initiated by a petition submitted to the local board of county commissioners and signed by a majority of landowners who collectively own a majority of the total acreage within the proposed district.<sup>118</sup> If the petition includes the requisite number of signatures, the board of county commissioners will then submit the question of the district’s organization to a special election among all landowners within the proposed district, at which time a potential board of directors for the proposed district will also be elected.<sup>119</sup> If a majority of landowners approve the formation of the district, the board of county commissioners will declare the district duly organized, and designate the elected board of directors as the district’s governing body.<sup>120</sup>

*Water-Related Authority.* Drainage districts are authorized to construct, purchase, or otherwise acquire drainage and irrigation works, rights-of-way, and any related necessary property, either within or outside the district, and to appropriate and divert waters of the state for recognized beneficial purposes.<sup>121</sup> For drainage districts, the power

of eminent domain is limited to water works and rights of way.<sup>122</sup> To raise revenue for the acquisition of necessary infrastructure, drainage districts are authorized to contract with the federal government, issue bonds, and levy taxes against property owners benefited by the district's services.<sup>123</sup>

**F. Internal Improvement Districts (Flood Control)** (Colo. Rev. Stat. §§ 37-44-101 through 37-44-149) – Locally organized districts with authority to provide the necessary infrastructure to prevent flooding and provide supplemental irrigation water to lands within their district.

*Formation.* Organization of an internal improvement district may be initiated by a petition submitted to the local district court and signed by a majority of the landowners within the proposed district.<sup>124</sup> The petition must include a general description of the boundaries of the proposed district and the means by which the district would both protect property from flooding and provide water for the irrigation of lands within the district's boundaries.<sup>125</sup> If the petition includes the requisite information and signatures, the court will submit the question of the district's formation to a special election in which only affected landowners may vote, and at which time a potential board of directors for the proposed district will also be elected.<sup>126</sup> If a majority of landowners who also own a majority of the land within the proposed district vote in favor of the measure, the court will declare the internal improvement district duly organized, and designate the elected board of directors as the district's governing body.<sup>127</sup>

*Water-Related Authority.* Internal improvement districts are authorized to provide for the drainage of lands, both within and outside the district's boundaries, and to acquire any public works and infrastructural improvements necessary to provide for such services.<sup>128</sup> To raise revenue for the construction, acquisition, and maintenance of such facilities, internal improvement districts may contract with the federal government, issue bonds, levy taxes against property within the district, and lease and sell excess water.<sup>129</sup> Such districts may exercise the power of eminent domain in order to condemn any lands or structures required to carry out the district's statutory objectives.<sup>130</sup> However, any action to condemn property valued at more than \$25,000 requires a majority vote by the landowners within the district.<sup>131</sup> Any water stored and necessary for irrigation of lands within the district must be apportioned among the eligible lands, in proportion to the taxes paid for such services.<sup>132</sup> Finally, in order to prevent damage to property from flooding, internal improvement districts are authorized to "clean out, straighten, widen, alter, deepen, or change the course or terminus of any ditch, drain, sewer, reservoir, watercourse, pond, lake, creek, or natural stream," either within or outside the district.<sup>133</sup>

**G. Ground Water Management Districts** (Colo. Rev. Stat. §§ 37-90-118 through 37-90-135) – Locally organized districts with the authority to manage the permitted use of ground water resources in identified aquifers.

*Formation.* Ground water management districts may only be organized in designated ground water basins, as identified by the Colorado Ground Water Commission (the Commission).<sup>134</sup> Property owners within a basin must submit a petition, signed by at least 15 percent of the affected taxpayers, to the Commission, proposing the formation of a ground water management district, along with a potential board of directors.<sup>135</sup> If the Commission determines that the boundaries of the proposed district conform to the hydrogeologic boundaries of the aquifer or aquifers underlying the basin, the Commission can conduct a public hearing on the matter and submit the question of the district's formation to a special election.<sup>136</sup> If a majority of property owners vote in favor of the district's

formation, the Commission will declare the district duly organized, and designate the named directors in the petition to serve as the district's governing body.<sup>137</sup>

*Water-Related Authority.* The permitting of new wells for the extraction of ground water from designated ground water basins is the exclusive jurisdiction of the Commission.<sup>138</sup> However, ground water management districts are authorized to "regulate the use, control, and conservation of the ground water" from permitted wells within their respective districts.<sup>139</sup> Ground water management districts may require specific well-spacing within the district, develop a comprehensive plan for the most efficient use of ground water within the district, limit the amount of ground water withdrawal from the aquifer as a whole, prohibit the use of ground water outside the district, enforce well permit conditions for small capacity wells, and otherwise promulgate any reasonable rules and regulations necessary "for the purpose of conserving, preserving, protecting, and recharging" the ground water of the district.<sup>140</sup> All such measures are subject to review and final approval by the Commission.<sup>141</sup> Ground water districts are also authorized to construct wells, drain lakes and creeks, and install pumps or other necessary equipment in order to recharge the district's ground water reservoir.<sup>142</sup>

**H. Special Districts** (Special District Act, Colo. Rev. Stat. §§ 32-1-101 through 32-1-1807) – Locally organized districts with authority to provide specific public services, as defined by statute and designated in each special district's respective service plan.

*Formation.* The first step in the organization of a special district is the submission of a draft service plan for the proposed district to the applicable local government, detailing, in part, the services to be provided by the district, a financial plan for the district, a general description of the facilities to be constructed, and a preliminary engineering survey for such improvements.<sup>143</sup> The board of county commissioners of each county that has territory included within a proposed special district must review and approve the petition for a proposed special district, unless the proposed special district falls entirely within the boundaries of a municipality, in which case the governing body of the municipality will serve as the approving authority.<sup>144</sup> After receiving the requisite approval from local governments, the proponents of the special district must petition the local district courts to review and certify the organization of the special district.<sup>145</sup> The court can dismiss the petition if it finds that the approving authority's decision was arbitrary, capricious, or unreasonable.<sup>146</sup>

*Common Authority.* In the execution of a specific service plan, special districts are authorized to acquire any rights and interests in real and personal property.<sup>147</sup> Special districts may also raise revenue and recover the cost of their services through bonds, user fees and tolls, and property taxes on land within the district.<sup>148</sup> Finally, special districts are authorized to adopt and enforce any rules or regulations necessary for the provision of their respective services.<sup>149</sup>

*Water-Related Authority.* Any special district that provides either water or sanitation services is authorized to acquire any reservoirs, treatment works, facilities, equipment, and water rights (either within or outside the district) that are necessary; such districts may also exercise the power of eminent domain, though not for the acquisition of water rights.<sup>150</sup> Several categories of special districts exist:

1. **Metropolitan Districts** – Special districts providing any two or more of the following services: fire protection, mosquito control, parks and recreation, safety protection, sanitation, solid waste disposal facilities or collection and transportation of solid waste, street improvements, television relay and translation, transportation, and water.<sup>151</sup>
2. **Water Districts** – Special districts supplying water for domestic and other public and private purposes.<sup>152</sup>
3. **Water & Sanitation Districts** – Special districts providing both water and sanitation services.<sup>153</sup>
4. **Sanitation Districts** – Special districts providing any of the following services: storm or sanitary sewers, flood and surface drainage, treatment and disposal works and facilities, or solid waste disposal services.<sup>154</sup>

- I. **Regional Service Authorities** (Service Authority Act of 1972, Colo. Rev. Stat. §§ 32-7-101 through 32-7-146) – Locally organized entities with the authority to provide one or more enumerated public services, including domestic water and sewage services, urban drainage and flood control, gas and electric services (from conventional or renewable sources), and land and soil preservation.<sup>155</sup>

*Formation.* The formation of a regional service authority may be initiated by either a petition signed by at least five percent of the eligible voters, or a resolution adopted by a majority of the governing counties and municipalities within the boundaries of the proposed authority, which is submitted to the local district court.<sup>156</sup> If the petition or resolution is duly executed, the district court will appoint an organizational commission, which will be responsible for determining what services the regional service authority should provide, if not specified in the petition or resolution, and the potential tax liability for landowners within the proposed regional service authority for the provision of such services.<sup>157</sup> After the commission’s report is made public, the question of the proposed regional service authority’s formation will then be submitted to eligible voters in a special election, which can be approved by a majority vote.<sup>158</sup>

*Structure and Organization.* Regional service authorities are governed by a board of directors, elected for four-year terms.<sup>159</sup> In exercising the service authority’s powers, the board of directors may elect to establish local improvement districts within the regional service authority for the financing, construction, or improvement of facilities within a specific portion of their jurisdiction, the management of which is retained by the board.<sup>160</sup>

*General Authority.* Regional service authorities may construct, acquire, maintain, and operate public works and related facilities on any public lands within the state.<sup>161</sup> In acquiring any necessary property to provide their services, regional service authorities may issue bonds, charge for the services they provide, and raise revenue through property taxes within their jurisdiction.<sup>162</sup> Regional service authorities may also exercise the power of eminent domain over “any private property,” including vested water rights, regardless of where located.<sup>163</sup> Regional service authorities may also adopt, by resolution, and enforce any regulations necessary and appropriate for the provision of their services.<sup>164</sup> Finally, regional service authorities may, at their discretion, review the comprehensive plans of local governments within their boundaries; although, state law specifically provides that the services provided by a regional service authority are provided concurrently with the services of local

governments, and local governments may elect to exercise exclusive authority over the provision of such services within their jurisdiction.<sup>165</sup>

*Water-Related Authority.* For regional service authorities providing sewage services, their powers include those specifically provided to metropolitan sewage districts, as described below.<sup>166</sup> Similarly, for regional service authorities providing urban drainage and flood control, their powers include those provided to urban drainage and flood control districts, as described below.<sup>167</sup>

**J. Metropolitan Water Districts** (Colo. Rev. Stat. §§ 32-4-401 through 32-4-416) – Cooperative governmental entities organized for the purpose of providing water services for any beneficial purpose, including irrigation, to multiple municipalities and neighboring unincorporated areas.

*Formation.* Metropolitan water districts may be organized by two or more municipalities located in the same county or in adjacent or nearby counties.<sup>168</sup> To be included within a proposed district, the governing board of a municipality must hold a public hearing on the matter and pass an ordinance declaring that public convenience and necessity require inclusion within the proposed district.<sup>169</sup> Landowners within unincorporated territory may petition for inclusion within an existing metropolitan district, the petition for which must be signed by a majority of such landowners and accepted by the district’s board of directors.<sup>170</sup> Once formed, a board of directors, comprised of individuals appointed by each participating municipality and the board of county commissioners for participating unincorporated areas, is responsible for carrying out the duties of the metropolitan water district.<sup>171</sup>

*Water-Related Authority.* Metropolitan water districts have the authority to construct and maintain water facilities, both within and outside their respective boundaries, and to purchase and otherwise acquire any property, including water rights, necessary to carry out their broad statutory objectives.<sup>172</sup> To raise the necessary revenue for such public works, metropolitan water districts may contract with the federal government, issue bonds, charge rates against water users, and levy taxes against property within their district.<sup>173</sup> Metropolitan water districts may also exercise the power of eminent domain to acquire private property, including vested water rights, for public use.<sup>174</sup>

**K. Metropolitan Sewage Disposal Districts** (Colo. Rev. Stat. §§ 32-4-501 through 32-4-547) – Cooperative governmental entities organized for the purpose of providing sewage services to multiple municipalities.

*Formation.* Metropolitan sewage disposal districts may be formed within the corporate boundaries of any two or more municipalities, regardless of their proximity to each other.<sup>175</sup> To be included within a proposed district, the governing board of a municipality must hold a public hearing on the matter and pass an ordinance declaring the organization of a district necessary to public health, safety, and general welfare.<sup>176</sup> Once formed, a board of directors, comprised of individuals appointed by each participating municipality, is responsible for carrying out the duties of the metropolitan sewage disposal district.<sup>177</sup>

*Water-Related Authority.* Metropolitan sewage disposal districts have the authority to “acquire, hold, operate, maintain, equip, improve, and dispose of a sewage disposal system and appurtenant works,” regardless of where

such facilities are situated.<sup>178</sup> To raise the necessary revenue for such public works, metropolitan sewage disposal districts may contract with the federal government, issue bonds, charge rates against water users, and levy taxes against property within their district.<sup>179</sup> In order to provide proper sewage services, metropolitan sewage disposal districts may also exercise the power of eminent domain to acquire any property, including water rights, regardless of where such property is located and whether or not it is already employed in public use.<sup>180</sup>

**L. Power Authorities** (Colo. Rev. Stat. § 29-1-204) – Cooperative governmental entities formed by multiple municipalities for the production and transmission of electrical energy resources for the benefit of inhabitants of the contracting municipalities.

*Formation.* Power authorities can be established by contract between two or more municipalities that are authorized to own and operate electric systems.<sup>181</sup> Such contracts may specify how costs related to the power authority's activities are to be shared amongst the various municipalities, and may be for any length of time.<sup>182</sup> The contract must also provide for the appointment of a board of directors to serve as the power authority's governing body.<sup>183</sup>

*Water-Related Authority.* Power authorities are authorized to acquire, construct, and operate electrical facilities and works, which may include hydroelectric facilities and the associated water rights.<sup>184</sup> Power authorities also have the power to condemn private property, including water rights not already devoted to public purposes.<sup>185</sup>

**M. Water or Drainage Authorities** (Colo. Rev. Stat. § 29-1-204.2) – Cooperative governmental entities formed by any combination of municipalities, special districts, or other political subdivisions of the state for the development of water resources, systems, or drainage facilities.

*Formation.* Water or drainage authorities can be established by contract between two or more municipalities, special districts, or other political subdivisions of the state that are authorized to own and operate water system or drainage facilities.<sup>186</sup> Contracts may specify how costs related to the power authority's activities are to be shared among the various municipalities, and may be for any length of time.<sup>187</sup> The contract must also provide for the appointment of a board of directors to serve as the power authority's governing body.<sup>188</sup>

*Water-Related Authority.* Water or drainage authorities are authorized to acquire, construct, and operate water systems and facilities, or drainage facilities, as well as the associated water rights for such infrastructure.<sup>189</sup> Water or drainage authorities also have the power to condemn private property, but only for use as rights-of-way, thus excluding the use of eminent domain to acquire water rights.<sup>190</sup>

- <sup>1</sup> See Colo. Rev. Stat. § 30-15-401 (Lexis 2008).
- <sup>2</sup> Colo. Rev. Stat. §§ 29-20-102 and 29-20-104(1)(h) (Lexis 2008).
- <sup>3</sup> Colo. Rev. Stat. §§ 30-20-301 through 30-20-302; 30-20-402 (Lexis 2008).
- <sup>4</sup> Colo. Rev. Stat. § 30-20-301(2) (Lexis 2008).
- <sup>5</sup> Colo. Rev. Stat. § 30-20-402(1)(a) (Lexis 2008).
- <sup>6</sup> Colo. Rev. Stat. §§ 29-20-104(1)(a) and 30-28-115(1) (Lexis 2008).
- <sup>7</sup> See Colo. Rev. Stat. §§ 29-20-301 to 29-20-306 (Lexis 2008).
- <sup>8</sup> Colo. Rev. Stat. §§ 24-65.1-101(2)(b) and 24-65.1-203(1)(a) (Lexis 2008).
- <sup>9</sup> Colo. Rev. Stat. § 30-30-102 (Lexis 2008).
- <sup>10</sup> *Id.*
- <sup>11</sup> Colo. Rev. Stat. § 25-10-104 (Lexis 2008).
- <sup>12</sup> Colo. Rev. Stat. § 30-20-505 (Lexis 2008).
- <sup>13</sup> Colo. Rev. Stat. § 30-20-508(2), (4)(a) (Lexis 2008).
- <sup>14</sup> Colo. Rev. Stat. § 30-20-510 (Lexis 2008).
- <sup>15</sup> Colo. Rev. Stat. § 30-20-503 (Lexis 2008).
- <sup>16</sup> Colo. Rev. Stat. §§ 30-20-514, 30-20-522 and 30-20-512(1)(k) (Lexis 2008).
- <sup>17</sup> Colo. Rev. Stat. §§ 30-20-301, 30-20-302 and 30-20-512(1)(f) (Lexis 2008).
- <sup>18</sup> Colo. Rev. Stat. § 30-20-402(1)(a) (Lexis 2008).
- <sup>19</sup> Colo. Rev. Stat. § 30-20-603(a)(1) (Lexis 2008).
- <sup>20</sup> Colo. Rev. Stat. § 30-20-627 (Lexis 2008).
- <sup>21</sup> Colo. Rev. Stat. §§ 30-11-501 through 30-11-505 (Lexis 2008).
- <sup>22</sup> Colo. Rev. Stat. §§ 30-11-502 through 30-11-504 (Lexis 2008).
- <sup>23</sup> Colo. Const. art. XIV, § 16; Colo. Rev. Stat. § 30-35-103(4) (Lexis 2008).
- <sup>24</sup> *Id.*
- <sup>25</sup> *Save Palisade FruitLands v. Todd*, 279 F.3d 1204, 1208 (10th Cir. 2002).
- <sup>26</sup> *Id.*
- <sup>27</sup> Colo. Rev. Stat. § 30-35-102 (Lexis 2008).
- <sup>28</sup> *Id.*; Colo. Rev. Stat. § 30-35-201 (Lexis 2008).
- <sup>29</sup> Colo. Rev. Stat. § 30-35-201(14)-(16), (18)-(21), and (25)-(28) (Lexis 2008).
- <sup>30</sup> Colo. Rev. Stat. § 30-35-201(18); see Colo. Rev. Stat. § 30-35-201(41)-(43); Colo. Const. art. XX, § 1 (Lexis 2008).

<sup>31</sup> *City & Co. of Denver v. Bd. of Co. Commrs.*, 782 P.2d 753, 762-763 (Colo. 1989); *City of Colo. Springs v. Bd. of Co. Commrs.*, 895 P.2d 1105, 1116-1117 (Colo.App. 1994).

<sup>32</sup> Colo. Rev. Stat. §§ 31-2-101 through 31-2-101 (Lexis 2008).

<sup>33</sup> Colo. Rev. Stat. §§ 31-1-101(13) and 31-4-301 (Lexis 2008).

<sup>34</sup> Colo. Rev. Stat. §§ 31-1-101(2), 31-4-101, 31-4-102, 31-4-211, and 31-4-213 (Lexis 2008).

<sup>35</sup> See Colo. Rev. Stat. § 31-15-401 (Lexis 2008).

<sup>36</sup> Colo. Rev. Stat. §§ 29-20-102 and 29-20-104(1)(h) (Lexis 2008).

<sup>37</sup> Colo. Rev. Stat. §§ 31-15-708(1)(a) and 31-15-709 (Lexis 2008).

<sup>38</sup> Colo. Rev. Stat. §§ 31-15-708(1)(b)(I) and 38-6-202(2) (Lexis 2008).

<sup>39</sup> Colo. Rev. Stat. §§ 31-15-708(1)(b)(I) (Lexis 2008).

<sup>40</sup> Colo. Rev. Stat. §§ 38-6-201 through 38-6-216 (Lexis 2008).

<sup>41</sup> Colo. Rev. Stat. § 38-6-202(2) (Lexis 2008).

<sup>42</sup> Colo. Rev. Stat. § 38-6-207 (Lexis 2008).

<sup>43</sup> Colo. Rev. Stat. § 31-15-707 (Lexis 2008).

<sup>44</sup> Colo. Rev. Stat. § 29-20-104(1)(a) (Lexis 2008).

<sup>45</sup> See Colo. Rev. Stat. §§ 29-20-301 through 29-20-306 (Lexis 2008).

<sup>46</sup> Colo. Rev. Stat. §§ 24-65.1-101(2)(b) and 24-65.1-203(1)(a) (Lexis 2008).

<sup>47</sup> Colo. Rev. Stat. § 31-23-301(1) and (2) (Lexis 2008).

<sup>48</sup> Colo. Rev. Stat. § 31-35-501(1) (Lexis 2008).

<sup>49</sup> *Id.*

<sup>50</sup> Colo. Rev. Stat. § 31-35-510 (Lexis 2008).

<sup>51</sup> Colo. Rev. Stat. §§ 31-35-501(1) and 31-35-511 (Lexis 2008).

<sup>52</sup> Colo. Rev. Stat. § 31-25-604 (Lexis 2008).

<sup>53</sup> Colo. Rev. Stat. § 31-25-607(2), (4)(Lexis 2008).

<sup>54</sup> Colo. Rev. Stat. § 31-25-609 (Lexis 2008).

<sup>55</sup> Colo. Rev. Stat. § 31-25-602(1) (Lexis 2008).

<sup>56</sup> Colo. Rev. Stat. §§ 31-25-612, 31-25-611(k), and 31-25-620 (Lexis 2008).

<sup>57</sup> Colo. Rev. Stat. § 31-25-503(1)(a), (d) (Lexis 2008).

<sup>58</sup> *Id.* at (3).

<sup>59</sup> *Id.* at (1)(a).

<sup>60</sup> *Id.* at (5).

<sup>61</sup> Colo. Rev. Stat. § 31-25-502 (Lexis 2008).

<sup>62</sup> *Id.*

<sup>63</sup> Colo. Const. art. XX, § 6 (Lexis 2008).

<sup>64</sup> Colo. Rev. Stat. § 31-2-207 (Lexis 2008).

<sup>65</sup> Colo. Rev. Stat. §§ 31-2-204(2) and 31-2-206(4) (Lexis 2008).

<sup>66</sup> *See e.g.*, Colo. Rev. Stat. §§ 31-1-101(6), 31-15-401, 31-15-501, and 31-15-701; *see also*, Colo. Rev. Stat. §§ 31-35-501(1), 31-25-602(1), and 31-25-502 (Lexis 2008).

<sup>67</sup> Colo. Const. art. XX, § 6 (Lexis 2008).

<sup>68</sup> *Id.*

<sup>69</sup> *City & Co. of Denver v. Bd. of Co. Commrs.*, 782 P.2d 753, 762-763 (Colo. 1989); *City of Colo. Springs v. Bd. of Co. Commrs.*, 895 P.2d 1105, 1116-1117 (Colo.App. 1994).

<sup>70</sup> Colo. Rev. Stat. § 37-45-109 (Lexis 2008).

<sup>71</sup> *Id.* at (1)(c) and (2)(c).

<sup>72</sup> *Id.* at (2.5).

<sup>73</sup> Colo. Rev. Stat. § 37-45-114 (Lexis 2008).

<sup>74</sup> Colo. Rev. Stat. § 37-45-120 (Lexis 2008).

<sup>75</sup> Colo. Rev. Stat. § 37-45-118(1)(b)(I)(C) (Lexis 2008).

<sup>76</sup> *Id.* at (1)(e).

<sup>77</sup> *Id.* at (1)(j).

<sup>78</sup> Colo. Rev. Stat. § 37-45-118(1)(c) (Lexis 2008).

<sup>79</sup> *Id.*

<sup>80</sup> Lawrence MacDonnell and Charles Howe, "Area-of-Origin Protection in Transbasin Water Diversions: An Evaluation of Alternative Approaches," 57 U. Colo. L. Rev. 527, 537 (1986).

<sup>81</sup> Colo. Rev. Stat. § 37-45-118(b)(II) (Lexis 2008).

<sup>82</sup> MacDonnell and Howe, 57 U. Colo. L. Rev. at 537.

<sup>83</sup> Colo. Rev. Stat. § 37-45-118(1)(j) (Lexis 2008).

<sup>84</sup> *Id.* at (1)(f) and (g); *see also* Colo. Rev. Stat. §§ 37-45.1-102(1), 37-45.1-103 (Lexis 2008).

<sup>85</sup> *See* Colo. Rev. Stat. §§ 37-46-104(1), 37-47-104(1), 37-48-103(1), 37-50-104(1) (Lexis 2008). Note that the groundwater management districts within the Republican River Water Conservation District also each have the authority to appoint a director for that district, along with the Colorado Ground Water Commission.

<sup>86</sup> Colo. Rev. Stat. §§ 37-46-110(2), § 37-47-110(2), and 37-48-108(2) (Lexis 2008).

<sup>87</sup> Colo. Rev. Stat. §§ 37-46-150, 37-47-150, 37-48-192, and 37-50-140 (Lexis 2008).

<sup>88</sup> Colo. Rev. Stat. §§ 37-46-101, 37-47-101, 37-48-101, and 37-50-101 (Lexis 2008).

<sup>89</sup> Colo. Rev. Stat. §§ 37-46-107(1)(c), 37-47-107(1)(c), and 37-48-105(1)(d), and 37-107(1)(e) (Lexis 2008).

<sup>90</sup> *Id.*; but note that the corresponding section for the Republican River Water Conservation District is slightly different from the statutes for the other three districts; specifically, Colo. Rev. Stat. § 37-107(1)(e) permits the district to make appropriations “for compact compliance purposes,” and to “do and perform all acts and things necessary or advisable to protect existing beneficial uses of water within the district through compliance with the Republican river compact” (Lexis 2008).

<sup>91</sup> Colo. Rev. Stat. §§ 37-46-132, 37-47-132, and 37-48-126 (Lexis 2008).

<sup>92</sup> Colo. Rev. Stat. §§ 37-45.1-102(1), 37-45.1-103, 37-46-107(1)(c) and (e), 37-46-49(2)(a), 37-46-150, 37-47-107(1)(c) and (e), 37-47-49(2)(a), 37-47-150, 37-48-105(1)(d) and (f), 37-48-191(2)(a), 37-48-192, 37-50-107(1)(e)-(g), and 37-50-140 (Lexis 2008).

<sup>93</sup> Colo. Rev. Stat. §§ 37-46-148(1)(b), 37-47-148(1)(b), 37-48-190(1)(b), and 37-50-139(1)(b) (Lexis 2008).

<sup>94</sup> Colo. Rev. Stat. §§ 37-46-107(1)(i), 37-47-107(1)(i), 37-48-105(1)(i), and 37-50-107(1)(j) (Lexis 2008).

<sup>95</sup> Colo. Rev. Stat. §§ 37-46-149(2)(b), 37-47-149(2)(b), 37-48-191(2)(b), and 37-50-107(1)(l) (Lexis 2008).

<sup>96</sup> Colo. Rev. Stat. §§ 37-46-149(1), 37-47-149(1), 37-48-191(1), and 37-50-107(1)(i) (Lexis 2008); for more information on the Colorado River District’s grant programs, see [http://www.crwcd.org/page\\_193](http://www.crwcd.org/page_193).

<sup>97</sup> Colo. Rev. Stat. §§ 37-45.1-102(1), 37-45.1-103, 37-46-109, 37-46-109, 37-48-110, and 37-50-109 (Lexis 2008).

<sup>98</sup> Colo. Rev. Stat. §§ 37-48-105(1)(n) and 37-50-107(1)(m) (Lexis 2008).

<sup>99</sup> Colo. Rev. Stat. §§ 37-46-148(1)(d), 37-47-148(1)(d), and 37-48-190(1)(d) (Lexis 2008).

<sup>100</sup> Colo. Rev. Stat. §§ 37-46-107(1)(j) and 37-47-107(1)(j) (Lexis 2008).

<sup>101</sup> Colo. Rev. Stat. §§ 37-41-102(2) and 37-42-101 (Lexis 2008).

<sup>102</sup> Colo. Rev. Stat. §§ 37-41-102(1)(c) and 37-42-101 (Lexis 2008).

<sup>103</sup> Colo. Rev. Stat. §§ 37-41-102(2), 37-42-106(2), and 37-43-108 (Lexis 2008).

<sup>104</sup> Colo. Rev. Stat. §§ 37-41-103(2) and 37-42-108(1) (Lexis 2008).

<sup>105</sup> Colo. Rev. State. § 37-41-113(3) (Lexis 2008). See also Colo. Rev. State. § 37-42-113 (Lexis 2008) (“... any other property or right necessary or useful for carrying out the objects of said irrigation district...”)

<sup>106</sup> *Id.*; see also Colo. Rev. Stat. §§ 37-41-114 and 37-41-130 (Lexis 2008).

<sup>107</sup> Colo. Rev. Stat. §§ 37-41-113(5) and 37-42-113(2) (Lexis 2008).

<sup>108</sup> Colo. Rev. Stat. §§ 37-41-113(7), 37-41-117, 37-41-120, 37-42-118, 37-42-122, 37-42-135, and § 37-42-137 (Lexis 2008).

<sup>109</sup> Colo. Rev. Stat. §§ 37-41-113(2) and 37-42-113(3) (Lexis 2008).

<sup>110</sup> Colo. Rev. Stat. § 37-2-102(1) (Lexis 2008).

<sup>111</sup> *Id.* at (2)

<sup>112</sup> Colo. Rev. Stat. §§ 37-2-105(7) and 37-3-101 (Lexis 2008).

<sup>113</sup> Colo. Rev. Stat. § 37-3-103(1)(a) (Lexis 2008).

<sup>114</sup> *Id.* at (1)(c).

<sup>115</sup> Colo. Rev. Stat. § 37-2-101(1)(f) (Lexis 2008).

- <sup>116</sup> Colo. Rev. Stat. § 37-3-103(1)(h) (Lexis 2008).
- <sup>117</sup> *Id.* at (2).
- <sup>118</sup> Colo. Rev. Stat. §§ 37-20-101 and 37-20-102 (Lexis 2008).
- <sup>119</sup> Colo. Rev. Stat. §§ 37-20-111 and 37-20-116 (Lexis 2008).
- <sup>120</sup> Colo. Rev. Stat. § 37-20-117 (Lexis 2008).
- <sup>121</sup> Colo. Rev. Stat. §§ 37-21-114 and 37-24-104 (Lexis 2008).
- <sup>122</sup> Colo. Rev. Stat. §§ 37-24-103 and 37-24-104 (Lexis 2008).
- <sup>123</sup> Colo. Rev. Stat. §§ 37-21-114(3), 37-25-101, and 37-23-101(1) (Lexis 2008).
- <sup>124</sup> Colo. Rev. Stat. § 37-44-102 (Lexis 2008).
- <sup>125</sup> *Id.*
- <sup>126</sup> Colo. Rev. Stat. §§ 37-44-104(5) and 37-44-105(4) (Lexis 2008).
- <sup>127</sup> Colo. Rev. Stat. § 37-44-106 (Lexis 2008).
- <sup>128</sup> Colo. Rev. Stat. §§ 37-44-103(1)(a) and 37-44-108(1) (Lexis 2008).
- <sup>129</sup> Colo. Rev. Stat. §§ 37-44-103(1)(d), 37-44-112, 37-44-114, and 37-44-108(4) (Lexis 2008).
- <sup>130</sup> Colo. Rev. Stat. § 37-44-103(1)(b) (Lexis 2008).
- <sup>131</sup> § 37-44-108(3) (Lexis 2008).
- <sup>132</sup> *Id.* at (3).
- <sup>133</sup> *Id.* at (6).
- <sup>134</sup> Colo. Rev. Stat. §§ 37-90-106 and 37-90-118 (Lexis 2008).
- <sup>135</sup> Colo. Rev. Stat. § 37-90-120 (Lexis 2008).
- <sup>136</sup> Colo. Rev. Stat. § § 37-90-119, 37-90-122, and 37-90-123 (Lexis 2008).
- <sup>137</sup> Colo. Rev. Stat. § 37-90-124(1) and (5) (Lexis 2008).
- <sup>138</sup> Colo. Rev. Stat. § 37-90-107 (Lexis 2008).
- <sup>139</sup> Colo. Rev. Stat. § 37-90-130(2) (Lexis 2008).
- <sup>140</sup> *Id.* at (2)(a), (c), (f), (g), (h), and (e).
- <sup>141</sup> *Id.* at (2).
- <sup>142</sup> *Id.* at (2)(b).
- <sup>143</sup> Colo. Rev. Stat. § 32-1-202(2) (Lexis 2008).
- <sup>144</sup> Colo. Rev. Stat. §§ 32-1-202, 32-1-203, and 32-1-204.5 (Lexis 2008).
- <sup>145</sup> Colo. Rev. Stat. §§ 32-1-201 through 32-1-206 (Lexis 2008).
- <sup>146</sup> Colo. Rev. Stat. §§ 32-1-205 and 32-1-206(1) (Lexis 2008).

<sup>147</sup> Colo. Rev. Stat. § 32-1-1001(1)(f) (Lexis 2008).

<sup>148</sup> Colo. Rev. Stat. § 32-1-1101 (Lexis 2008).

<sup>149</sup> Colo. Rev. Stat. § 32-1-1001(1)(n) (Lexis 2008).

<sup>150</sup> Colo. Rev. Stat. §§ 32-1-1004 and 32-1-1006 (Lexis 2008).

<sup>151</sup> Colo. Rev. Stat. §§ 32-1-103(10) and 32-1-1004 (Lexis 2008).

<sup>152</sup> Colo. Rev. Stat. §§ 32-1-103 (25) and 32-1-1006 (Lexis 2008).

<sup>153</sup> Colo. Rev. Stat. §§ 32-1-103 (25) and 32-1-1006 (Lexis 2008).

<sup>154</sup> Colo. Rev. Stat. §§ 32-1-103(18) and 32-1-1006 (Lexis 2008).

<sup>155</sup> See Colo. Rev. Stat. § 32-7-111(1) (Lexis 2008).

<sup>156</sup> Colo. Rev. Stat. § 32-7-105(1) (Lexis 2008).

<sup>157</sup> *Id.* at (3); see also Colo. Rev. Stat. § 32-7-107 (Lexis 2008).

<sup>158</sup> Colo. Rev. Stat. § 32-7-109 (Lexis 2008).

<sup>159</sup> Colo. Rev. Stat. § 32-7-110 (Lexis 2008).

<sup>160</sup> Colo. Rev. Stat. § 32-7-134 (Lexis 2008).

<sup>161</sup> Colo. Rev. Stat. § 32-7-113(1)(l) (Lexis 2008).

<sup>162</sup> *Id.* at (1)(e) and (m).

<sup>163</sup> *Id.* at (1)(k).

<sup>164</sup> *Id.* at (1)(o).

<sup>165</sup> *Id.* at (1)(p)(I) and Colo. Rev. Stat. § 32-7-111(2) (Lexis 2008).

<sup>166</sup> Colo. Rev. State. § 32-7-141 (Lexis 2008).

<sup>167</sup> Colo. Rev. State. § 32-7-142 (Lexis 2008).

<sup>168</sup> Colo. Rev. State. § 32-4-403 (Lexis 2008).

<sup>169</sup> Colo. Rev. State. § 32-4-404(1) (Lexis 2008).

<sup>170</sup> Colo. Rev. State. § 32-4-408 (Lexis 2008).

<sup>171</sup> Colo. Rev. State. § 32-4-405 (Lexis 2008).

<sup>172</sup> Colo. Rev. State. § 32-4-406(1)(f) and (k) (Lexis 2008).

<sup>173</sup> *Id.* at (1)(e), h, and (l).

<sup>174</sup> *Id.* at (1)(j)

<sup>175</sup> Colo. Rev. State. § 32-4-506 (Lexis 2008).

<sup>176</sup> Colo. Rev. State. § 32-4-508(1)(a) and (d) (Lexis 2008).

<sup>177</sup> Colo. Rev. State. § 32-4-508 (Lexis 2008).

<sup>178</sup> Colo. Rev. State. § 32-4-510(1)(k) (Lexis 2008).

<sup>179</sup> *Id.* at (1)(d), (e), (h), and (l).

<sup>180</sup> Colo. Rev. State. §§ 32-4-510(1)(f) and (j), and 32-4-502(5) (Lexis 2008).

<sup>181</sup> Colo. Rev. State. § 29-1-204(1) (Lexis 2008).

<sup>182</sup> Colo. Rev. State. § 29-1-203(1) (Lexis 2008).

<sup>183</sup> Colo. Rev. State. § 29-1-204(2) (Lexis 2008).

<sup>184</sup> *Id.* at (3)(d).

<sup>185</sup> *Id.* at (3)(f).

<sup>186</sup> Colo. Rev. State. § 29-1-204.2(1) (Lexis 2008).

<sup>187</sup> Colo. Rev. State. § 29-1-203(1) (Lexis 2008).

<sup>188</sup> Colo. Rev. State. § 29-1-204.2(2) (Lexis 2008).

<sup>189</sup> *Id.* at (3)(d).

<sup>190</sup> *Id.* at (3)(f).

# ROARING FORK WATERSHED PLAN

*Sponsor: Ruedi Water & Power Authority  
Lead Consultant: Roaring Fork Conservancy*

