2885 South Gilpin St. Denver, Colorado October 1, 2014

Thank you for the opportunity to comment on Colorado's Water Plan.

## Environmental Responsibility

I hope that Colorado's Water Plan will recognize our generation's moral responsibility to future citizens and, indeed, to the future of life itself. The plan needs to be both sustainable and environmentally responsible. A healthy environment is by far the best legacy that we can pass on to future generations.

Strategies to protect the environment should include:

- Establishing science-based standards for flow characteristics required to maintain plants, fish, and wildlife dependent on our streams and rivers for propagation and survival. Others have mentioned this. It is essential
- Modifying water policies to assure that environmental standards are met before water is extracted for other uses. Instream flow rights begin to address this issue. Unfortunately, these are usually junior rights. The doctrine of prior appropriation should be modified to recognize rights of the stream and the animals that depend on it. They got here first.
- Appreciating the prairie as an ecosystem worthy of protection. Diverting water from streams for
  irrigating fields of water-hungry plants damages riparian ecosystems near the stream and prairie
  ecosystems near the fields. Let's encourage agricultural practices like cattle ranching that can
  make use of our prairies without destroying them.
- Requiring minimal standards for returning industrial water to the environment. I'm particularly
  concerned about the practice of injecting fracking effluents into deep wells. We've been down
  this road before with earthquakes and toxic plumes associated with injection wells at Rocky
  Mountain Arsenal. Let's not go there again. Cleaning up toxic effluents should be one of the
  costs of doing business.
- Recognizing stream health as a beneficial use and allowing non-governmental water rights to be established for maintaining stream health. Let's offer conservationists the opportunity to invest in healthy rivers.

## Conservation

Conservation is by far the most cost-effective way to deal with water shortages. Often conservation requires a lot of little changes, but little things add up. The Legislature should be commended for passing legislation that addresses issues like

- Requiring WaterSense-certified plumbing fixtures in new construction and replacement markets.
- Allowing counties to permit use of graywater for irrigation, and

• Permitting the temporary donation of water rights to enhance stream flow.

(Unfortunately the last of these measures never became law.)

I'd like to see some other changes as well:

- Encouraging water-responsible landscaping and outlawing covenants that require things like maintaining water-hungry bluegrass lawns.
- Tracking losses in municipal water systems and eliminating leaks. On average Denver had more than 295 water main breaks per year over the last 10 years. Colorado Springs had more than 133. Last year both cities did a little better than usual, but between these two cities there were still on average more than one break per day (372 breaks). Clearly, there's room for improvement.
- Allowing homeowners to collect rainwater for later use in their yards.
- Modifying water law to discourage waste. Our current "use it or lose it" water policy does just the opposite. As you know, agriculture is the largest water user in Colorado. "Buy and dry" is not all bad. If farmers can grow the same crops with less water, I fail to see why they shouldn't sell or lease the excess to someone else. We might even consider subsidizing reductions in consumption by purchasing additional instream flow rights.

## Conclusion

Many of my suggestions and the suggestions of others would require changes in Colorado's water laws. I hope the Legislature has the foresight and fortitude to make these changes. Thank you again for allowing me to comment.

Sincerely yours,

Robert N. Stocker