

## **How to Create a Soft Path Plan**

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These steps serve as a basic guideline for creating a soft path plan. This process can be undertaken at the community, regional, watershed and even provincial level.

**1. Identify Water Services** – List all services provided by water (e.g. grass watering, flushing, clothes washing, etc.) and determine (using estimates where necessary) how much water is used by each service. Start thinking about the quality of water that is really needed to obtain a particular service. For example, do we need to use freshwater on our lawns? Or better yet, do we need to water our lawns at all?

**2. Adopt a Projection for your Community, Region or Watershed** – Create a Business-as-Usual scenario in, for example, 2030 or 2050 by applying current rates of water withdrawals and uses to the future population and economic growth or loss.

**3. Establish a Desired Future Scenario** – Create a desired future scenario for sources and uses of water in the year of your projection. The scenario should be sustainable or moving toward sustainability.

**4. Analyze Water Quantity and Quality** – Establish the quantity of water required to provide the services identified (Step 3) by applying as many of the water conserving options that can be adopted by your target year. Determine which uses require high quality water (e.g. drinking, cooking and bathing) and which uses can proceed with lower quality water (flushing, gardening, industrial applications).

**5. Review Water Supply Options** – Identify all current sources of water and determine whether any are being over-used or degraded. Be sure to include both surface water and groundwater, and both public and private supplies. Reduce withdrawals of freshwater or releases of wastewater that threaten long-term renewable use, and reject any new sources of supply that cross major watershed boundaries or that threaten ecological, cultural or social values. Adjust future supply for likely effects of climate change.

**6. Backcast** – Create various soft paths by designing incremental policies and programs to get from “there to here.” In Step 3, you identified a desired future. In Step 4 you found ways to make that future work and in Step 5 you defined supply constraints. What do you need to do to get to that future, ensuring all options are economically feasible, socially acceptable and politically achievable? This iterative process is backcasting and it connects “there” to “here.”

Almost all soft path backcasting includes at least two scenarios:

- In one scenario, adjustments are explored to the fullest extent possible within the limits of what is, or what is expected to be, cost effective. Suppose that a region has set a goal of no new water supply projects until 2050. Soft path analysis might suggest a policy mix including volume-based pricing, education and social marketing, rebates for low-flow toilets, and recycled water for parks and golf courses.
- In a second scenario, demand management is supplemented by changes in personal habits, growth rates and economic structure. If the same region wanted to preserve as much land as possible in a natural state, farmers could be urged to return to rain-fed agriculture, urban planning could be adjusted to reduce run-off, and water-intensive industries could be discouraged or prohibited.

How much backcasting is enough? It's enough when your water use projections are at least reasonably persuasive—not to you, the analyst, but to the officials, planners, journalists and others who will read your report without having gone through all the previous steps.

**Step 7: Write, Talk and Promote** – Now that you have developed a workable scenario, the next and very important step in soft path planning is to improve upon your conclusions by going to the public for their input. Then, after revision, you are ready to take your scenario to the public again and to people who influence and make key decisions about fresh water. Only your imagination and your energy should limit the effort put into promoting water soft path results.