Draft, Temporary 'Pro- List' for the When Element 3? Question

Esteemed Ctte Members---

On Thursday and Friday you will need to decide the timing and decision rules for a possible study and building of Element 3. (That is, if you want to be done by the end of the month!)

To support that discussion, I have started the build of a Pro-Con list for three points in the decision space. Please add to this and send it back to me, if you possibly can, by Thursday noon.

Sorry, but the three points don't exactly match up with the pathways (this is because they are a synthesis of the pathway *and* the decision rules you change course within the pathway). Accordingly the names of these three are:

- All is (usually) Better
- Be Prepared
- Study if Needed

All is (usually) Better

Even if Element 1 and 2 work, I still want Element 3. Even if Element 3 works, I still want Elements 1 and 2. Let's get started.

Pro's:

- Simplicity: this approach requires many fewer big decisions in the future.
- Includes a rainfall-independent component
- Robustness: Elements 1 and 2 may be vulnerable to certain types of threats (not merely drought, as above) and Element 3 may be vulnerable to a different set of possible threats. But if the system as a whole includes 1, 2 *and* 3 it can probably 'weather' just about anything that fate can throw at it.

Con's

- Expensive, energy-intensive
- Public acceptance for Element 3 would be difficult
- Worry that once plant is built, commitment to groundwater strategies is less

Be Prepared

While Elements 1 and 2 are carried out, Element 3 is brought to a state of preparedness so that, if Elements 1 and 2 underperform, Element 3 can then be brought on relatively quickly.

Pro's

- Getting started on the **study** of Element 3 at the outset means that
    - if Element 3 is needed urgently later, it can be brought on line sooner.
    - This in turn gives the community confidence to give Elements 1 and 2 more time to show their stuff.
    - Getting started on the studying is inexpensive (and buys you time even if Element 3 is never built)
- Letting the leash out slowly on the **building** of Element 3, if and as it becomes necessary provides for
    - More public acceptance for Element 3
    - Less likely to build Element 3 unnecessarily

Con's

- It's possible you would end up with Element 3 and a small Element 1 / 2 combo, but overall this is less robust than the All Is Better approach.
- Once you study something, more human inclination to build it.

Big Questions

- When do you ask the question whether Element 3 is needed? (How long do you let Elements 1 and 2 show their stuff?)
- What are the rules for deciding that Element 3 is needed?

Study if Needed

This is like the Staggered Approach except that the Element 3 study only occurs, if at all, after Elements 1 and 2 have had a chance to demonstrate their level of performance.

Pro's

- Avoids perhaps-unnecessary study of Element 3
- Diminishes likelihood of perhaps-unnecessary building of Element 3
- Supports commitment to Elements 1 and 2 as well as perception of commitment
- If Element 3 is needed, more likely to have public support at that point

Con's

- Not as diverse as the All Is Better approach
- Not as nimble as the Be Prepared approach

Big Questions

- When do you ask the question whether Element 3 is needed? (How long do you let Elements 1 and 2 show their stuff?)
- What are the rules for deciding that Element 3 is needed?