Supplemental Checklist – Construction of Water Supply Facilities (new or replacement wells, surface water intakes, storage facilities, and pumping stations)

1. The applicant must clearly articulate why the new source of water supply is needed. Reasons include:
   - Meeting increased customer demand.
   - Improving system reliability.
   - Providing adequate fire protection flows.
   - Replacing plant that has reached its design life.
   - Meeting public health regulations.

2. Based on the answer above, the applicant must address PSC 184.04(3)(b) “Information supporting the purpose and necessity of the project” by numerically justifying the need for the new source of supply. At a minimum the applicant must apply equations 3 and 4 from the document, “How Much Water Supply Capacity Should a Public Water System Have?” (Andy Jacque, Wisconsin Water Association Spring 2013). If this analysis is not sufficient to justify the new source of supply then the applicant must provide numerical analysis showing why the new supply is needed.

3. If future demand is used to justify the new water supply, then a copy of the demand study must be included with the application.

4. Is the project needed to meet existing DNR consent order or deficiencies listed in the utility’s latest sanitary survey report?

5. Provide a cost comparison analysis of alternatives including:
   - Looking at expanding capacity of existing wells instead of building new supply.
   - Looking at expanding reservoir storage instead of new supply.
   - Connecting to neighboring utilities.
   - Implementing conservation efforts.
   - Reducing non-revenue water.

6. Describe how any large water customers impact the design of the new water source including:
   - List the largest customer in the water utility and their most recent annual water usage.
   - What percentage of the utility’s total water usage does this customer represent?
   - Does this customer’s usage significantly impact the proposed capacity of the new source of supply?
   - Does this customer plan to drill their own well or significantly reduce their usage in the next 5 to 10 years?
   - Do they plan to expand their water usage in the next 5 to 10 years?
   - Do they plan to implement any water conservation programs?
   - Describe how any large industrial customer will either pay a share of the new construction or guarantee water purchases over life of loan.
   - Is there a city ordinance in place to prevent large customers from drilling their own wells and disconnecting from the utility’s water system?

7. Describe how the new water supply source fits into the utility’s Water Infrastructure Capital Improvement Plan or Water System Improvement Plan. Include a copy of the plan with the
application. If the utility does not have a Capital Improvement Plan or Water System Improvement Plan then describe how and when the utility will develop such a plan.