

## Capacity / Loadings Study

- Summary and budget estimates provided via Mike Gerbitz, Donohue
1. Summarize historical flows and loadings: last 5 years.
  2. Develop future flow and loading scenarios: 5 years, 10 years, and 20 years. In some instances, perhaps if there are large industries, it is beneficial to develop several projection scenarios – e.g., most probable, highest practical, lowest practical.
  3. Perform capacity analysis, unit process by unit process.
    - a. Name plate capacity – e.g., the current plant rating
    - b. Identify potential “free” capacity increases or the maximum installed capacity – e.g., the rating that might be achieved with zero capital spending. In many instances, the “name plate” capacity is conservative and a Facility has inherent capacity that the Owner or regulator has not yet recognized. Owners can write a capacity re-rate study using this information, get WDNR to approve it, and then use that capacity moving forward (e.g., CMAR). This is the lowest-cost capacity available to any Facility.
    - c. Use the unit-process capacity analysis to identify where in the Facility the capacity shortcomings are or will be within the planning period. In some instances, we have developed an improvement

\*\* Pause \*\*

Determine next planning step armed with the information above: proceed with capacity re-rate, full-blown Facility Plan, industrial pre-treatment, etc.

### Estimated costs:

- If District has all the data required and these first projections will be simple with no to minimal community meetings, then cost will likely be in the \$15-20k range.
- If consultant needs to spend time working with communities and industries to consider and develop future flow and loading scenarios (e.g., multiple meetings and iterations) then cost could be up to \$30k

### Commission action options:

- No Action at this time – review this item in future as circumstances dictate
- Request Donohue draft Amendment 14 to Engineering services agreement to include a scope of services, project timeline, and cost for consulting services for Commission action in 2019
- Prepare 2020 budget with inclusion of budget estimates with anticipated Commission action in early 2020

# BOD Loadings – 2019 estimate/Increase

Year	Total pounds - Influent	Load - %
2019 (Jan-Jun)	2007009 / 4014018	+5.6%
2018	3802459	15.2%
2017	3301000	4.4%
2016	3159462	7.5%
2015	2943000	13.3%
2014	2598000	-7.4%
2013	2806000	