HRL Steering Committee Meeting #4

Supporting Materials

Review of TAGs’ Input

## Preliminarily, the Agriculture TAG appears positively inclined toward the following Agriculture Rule Proposal:

1. Overall NMS percentage reduction goals will be applied
2. Agriculture representatives will submit an annual report that gauges progress toward achieving the overall goals
3. The report will track production and implementation metrics that have been determined through consultation from the Steering Committee and other stakeholders
4. No nutrient loss/loading model (i.e. NLEW) will be required to demonstrate collective compliance with the overall NMS reduction goals
5. The need for local agricultural committees to assist data collection will be determined by the TAG
6. Other potential regulatory concepts under consideration but which have not coalesced around a central recommendation include:
   1. Controlling livestock access to streams
   2. Phosphorus-based waste application limits

## The Wastewater TAG has preliminarily reviewed the following Wastewater Rule Proposal:

1. Overall NMS percentage and corresponding load reduction goals will be required
2. Implementation toward achieving NMS goals will be staged
3. Early stages will require phosphorus reductions, later stages will require nitrogen reductions
4. Individual nutrient load allocations will be added to NPDES permits
5. A collective watershed loading cap will be optional

## DWR has offered the following Buffer Rule proposal, and the Riparian Buffer TAG has raised certain concerns:

1. General DWR intent is to carry forward the same overall buffer rule design currently in place in other major nutrient watersheds, including:
   1. A 50ft vegetated riparian area will be protected in Zone 1 (inner 30ft) and Zone 2 (outer 20ft)
   2. Riparian areas will be protected throughout the entire watershed
   3. Existing uses in the 50’ can continue, but a change of use invokes buffer protections
2. The TAG is investigating possible modifications to the forest harvesting provisions for each zone
3. The TAG is reviewing the Table of Uses for watershed-specific concerns

Towards Identification of Regulated Nutrient Sources

## Septic System Distribution and Performance in High Rock Lake Watershed

The Division of Environmental Health aided in producing overall numbers of new septic systems and system repairs through 2021. The following charts show new installations and repairs, scaled to the same axis.

DEH also provided daily loading estimates for each subwatershed catchment in the High Rock Lake Watershed in 2021. These numbers were used to calculate annual totals for TP and TN, and this data was compared against baseline septic system loading data from Tetra Tech’s 2012 Watershed Model Report. The data shows an approximately 13% and 14% reduction in phosphorus and nitrogen loading, respectively, since the 2006 baseline.

|  |  |  |  |
| --- | --- | --- | --- |
| Total HRL Septic System Loading (DEH, 2021) | |  |  |
|  | TP Load (lb/day) | TKN(mgN/L) (lb/day) | NO3(mgN/L) (lb/day) |
| Mean | 0.85 | 2.36 | 3.18 |
| Median | 0.66 | 1.82 | 2.45 |
| Daily Total | 123.25 | 341.77 | 461.29 |
| Annual Total (lb/yr) | 44,985 | 124,747 | 168,371 |
| Combined N Loading (lb/yr) |  | 293,117 |  |
| Baseline Loading (lb/yr) (Tetra Tech, 2012) | 52,000 | 342,000 |  |
| 2021 Reduction from Baseline | **13%** | **14%** |  |

## Wastewater Discharge in High Rock Lake Watershed (following pages)

## Mean Daily Flow by Wastewater Facility (**Red** is 2006, **Blue** is 2021)

## Annual Phosphorus Loading by Wastewater Facility

## Annual Nitrogen Loading by Wastewater Facility