Joint Agriculture Committee

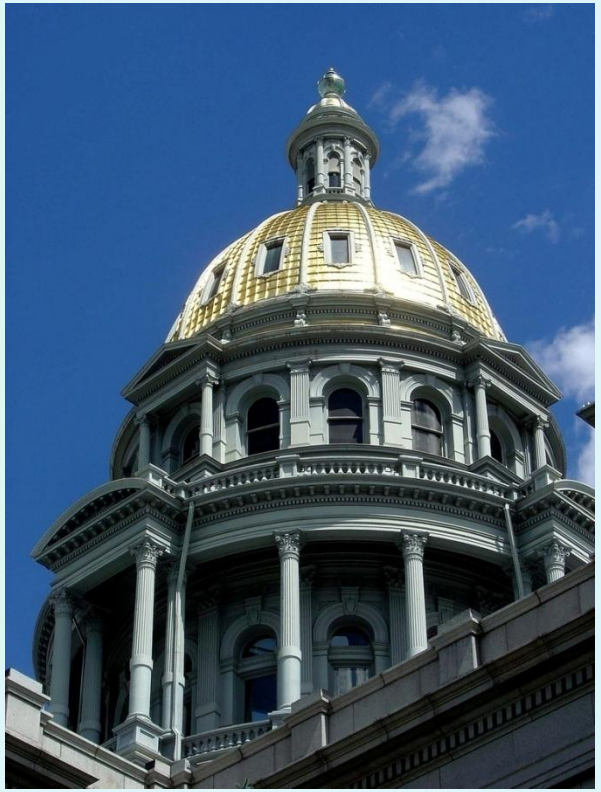
HJR 11-1025 Briefing

January 25, 2012

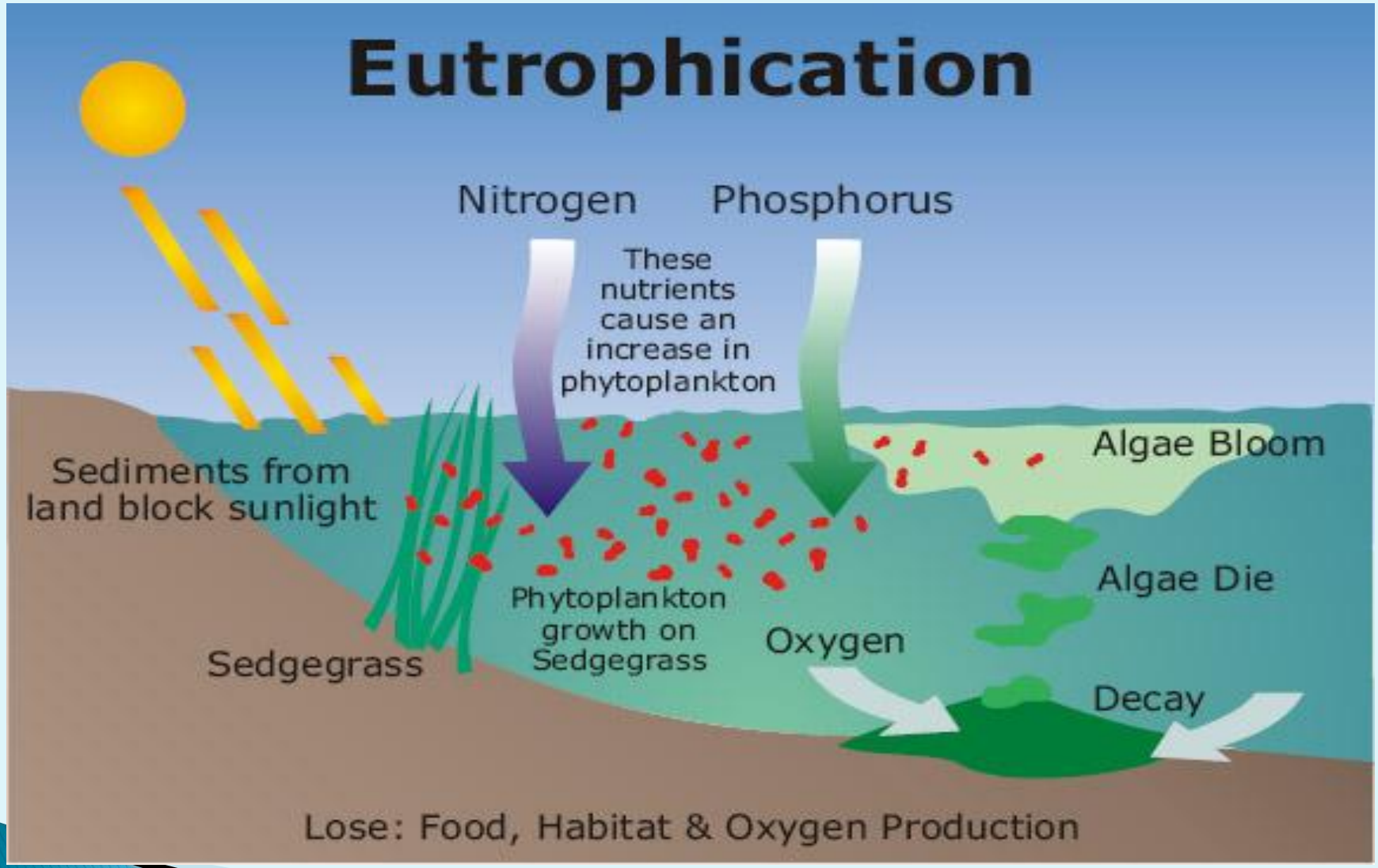
Christopher E. Urbina, MD, MPH, Executive Director and Chief Medical Officer
Steven H. Gunderson, Director, Water Quality Control Division
Colorado Dept. Public Health and Environment

House Joint Resolution 11-1025 Requires Presentation on Division Nutrient Proposal

- Presentation Shall Address How the Division's Proposal:
  - (a) Reflects active stakeholder participation;
  - (b) Fully considers the Cost/Benefit Study conclusions;
  - (c) Is structured to avoid unnecessary regulation and minimize the fiscal impact;
  - (d) Is designed to address basin-specific conditions; and
  - (e) Complies with Executive Order 2011-005



Nutrient Impacts



Nutrient Impacts

Sanchez Reservoir

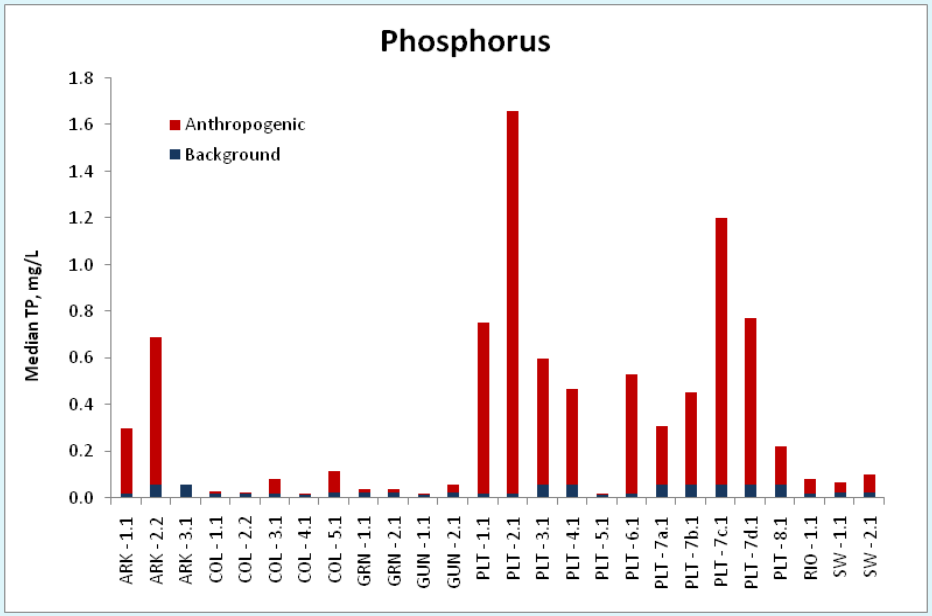
Fruitgrowers Reservoir

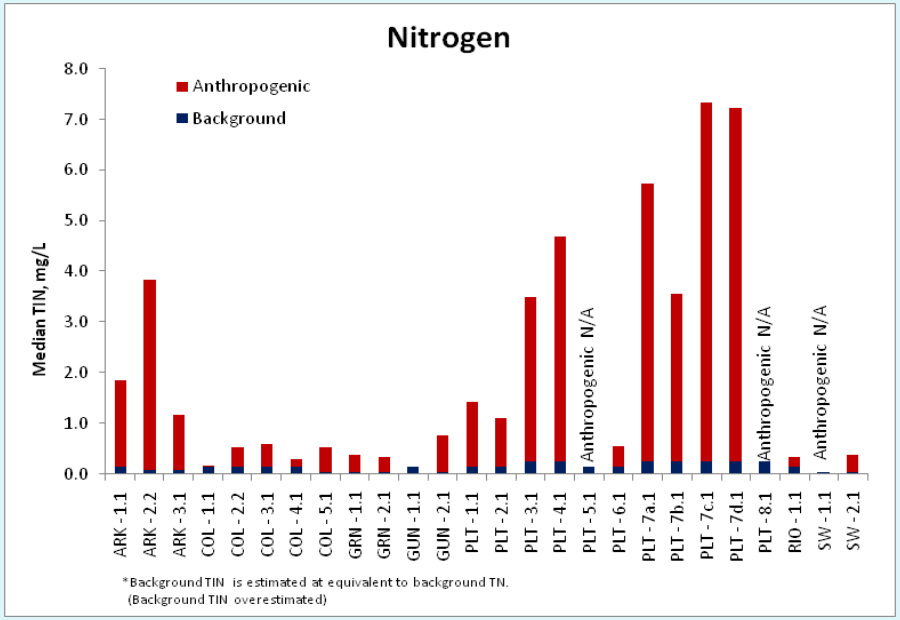
Nutrient Impacts

N. Fork Gunnison River

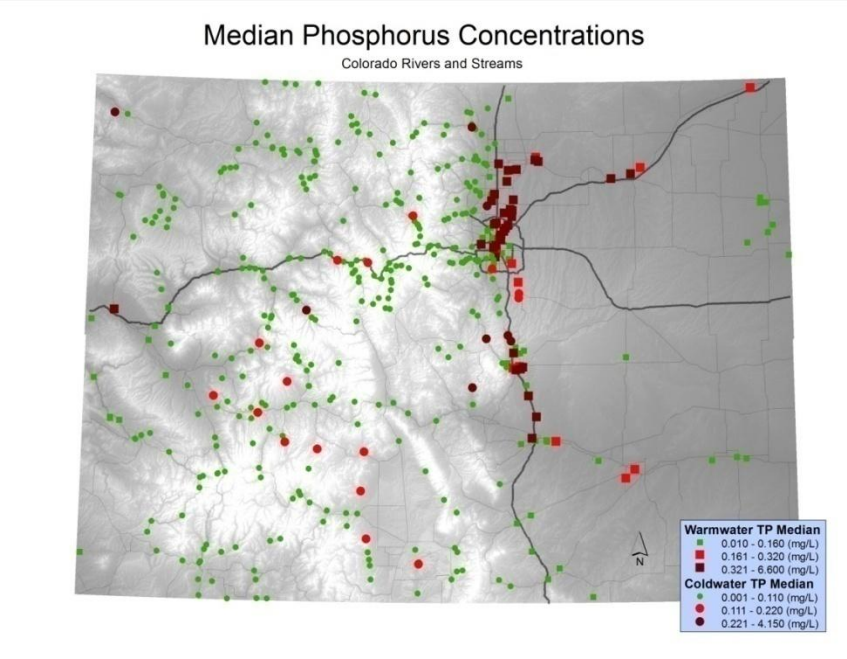
Barr Lake

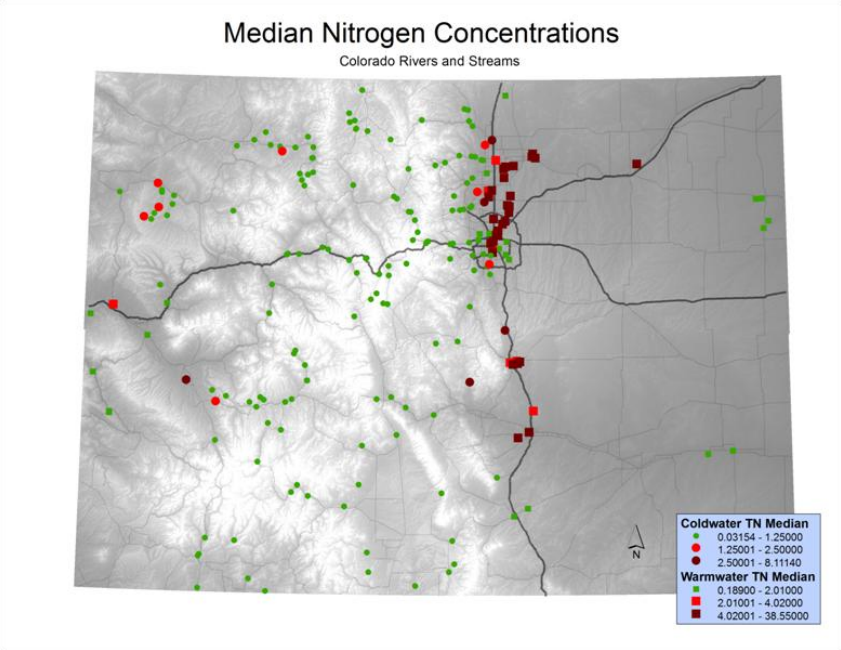
Nutrients in Colorado's Environment
Elevated above background



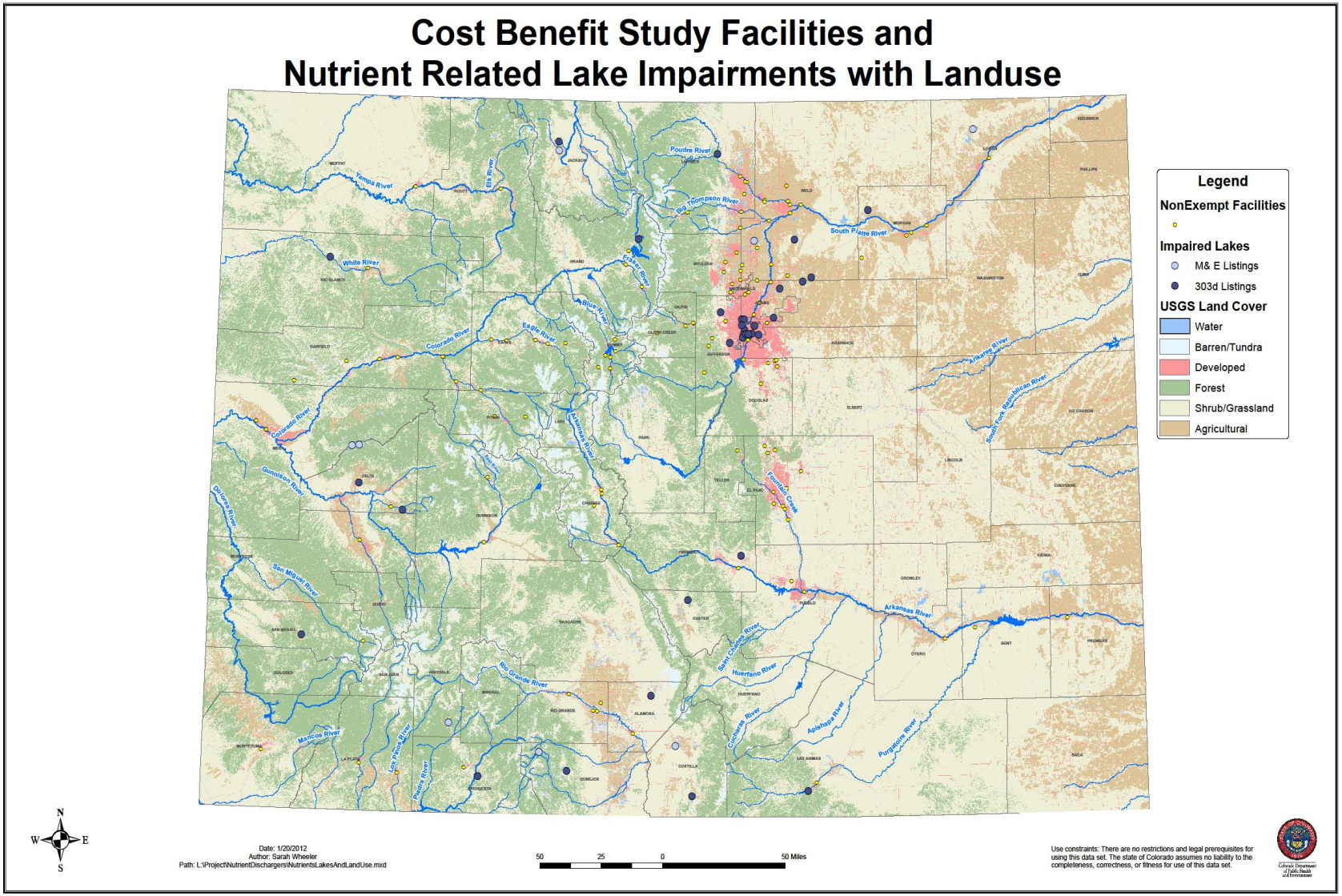


Distribution of Elevated Nutrient Concentrations





Lakes/Reservoirs Affected by Elevated Nutrients



Division's Nutrient Proposal

- Initially (2009/Early 2010) – Adoption of Criteria to be Applied as State Wide Standards
- "Traditional" regulatory approach
  - Standards would have been adopted into all river basins over 4 years.
  - Standards would have been implemented into permits.
  - Limits well below those in the current proposal.
  - Limits would have been required for many additional communities beyond those under the proposal.
  - Standards would have been used to determine impaired waters requiring TMDLs.

Division's Nutrient Proposal

- Tailored Approach (Sept. 2010 – Present)
  - Protect Sensitive Water Supplies
  - Water Quality Standards Upstream of Dischargers
  - Technology-Based Limits (Biological)
    - Only Required of the largest 33% of facilities.
    - Addresses ~ 95% of flow discharged statewide.
    - Exemptions for small & disadvantaged communities.
    - New variance provision-accounts for cost and WQ impact.
    - Facility-specific schedules to install wastewater treatment.

(a) Reflects Active Stakeholder Participation

- First meeting in Sept. 2001 – 57 meetings since
- 36 meetings in 2010 and 2011
- About 100 people/meeting
- E-mail distribution list of over 300 people
- Initial proposal in Feb. 2011
- Modified in July and Sept. 2011 based on stakeholder feedback

(b) Fully considers the Cost/Benefit Study

- Study developed in cooperation with stakeholders
  - Scope of work vetted and modified per comments.
  - Four stakeholder meetings (5/16, 6/24, 7/14 and 9/26) to present study approach/results.
  - Modifications made along the way where possible.
  - Some comments outside of scope of work.
  - Final report out in early December.

(b) Fully considers the Cost/Benefit Study

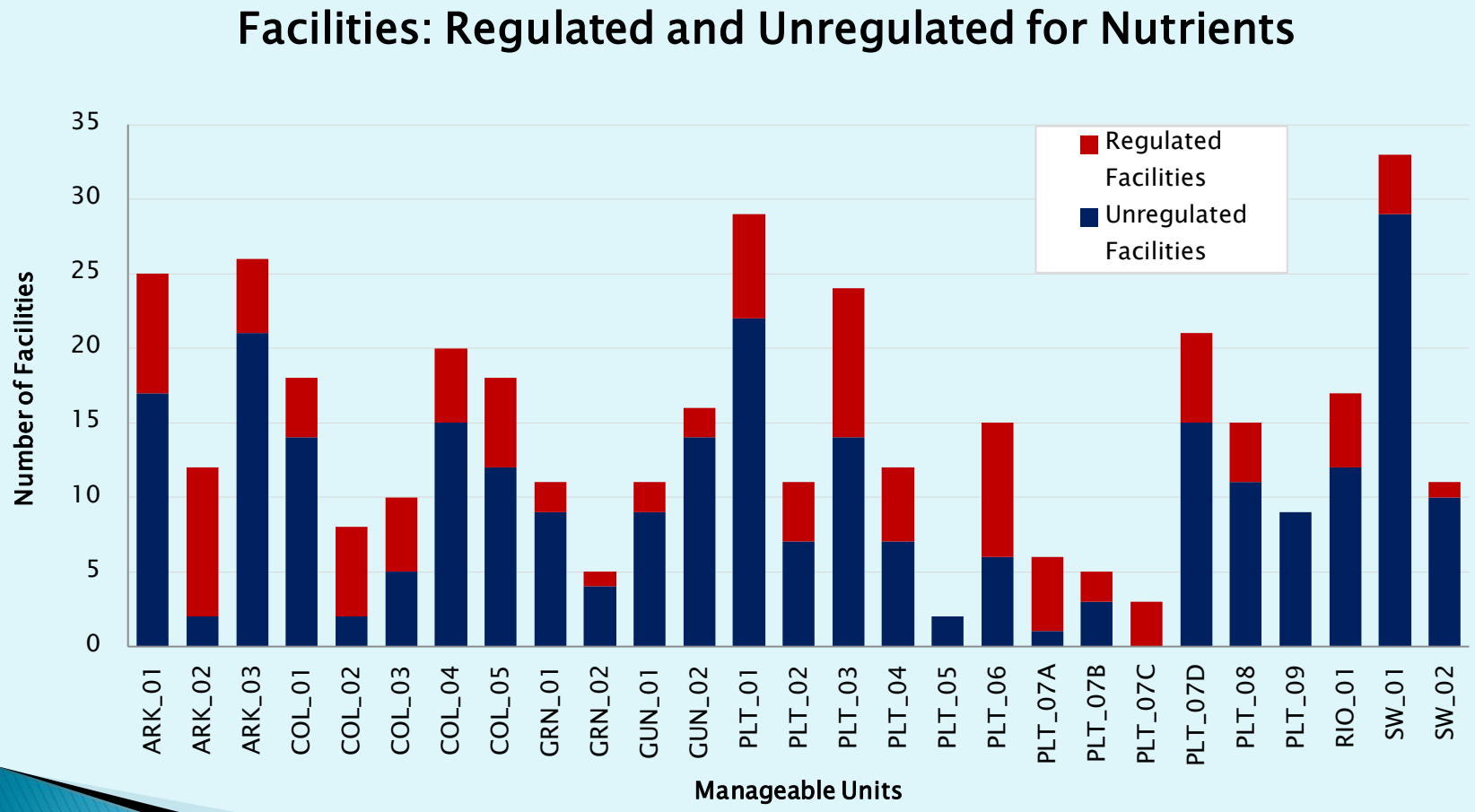
- Determined costs of treatment for proposed regulation and two other scenarios
- Statewide – $0.80 in benefits for every $1.00 in cost for proposed regulation
- Major river basin benefit to cost ratios varied
  - Less than 0.50:1 – Rio Grande, Southwestern, Colorado and Gunnison.
  - Between 0.50:1 and 1:1 – S. Platte and Yampa-White
  - Greater than 1:1 – Arkansas.
- Cost estimates used to increase discharge flow exemption category

(c) Is structured to avoid unnecessary regulation and minimize the fiscal impact

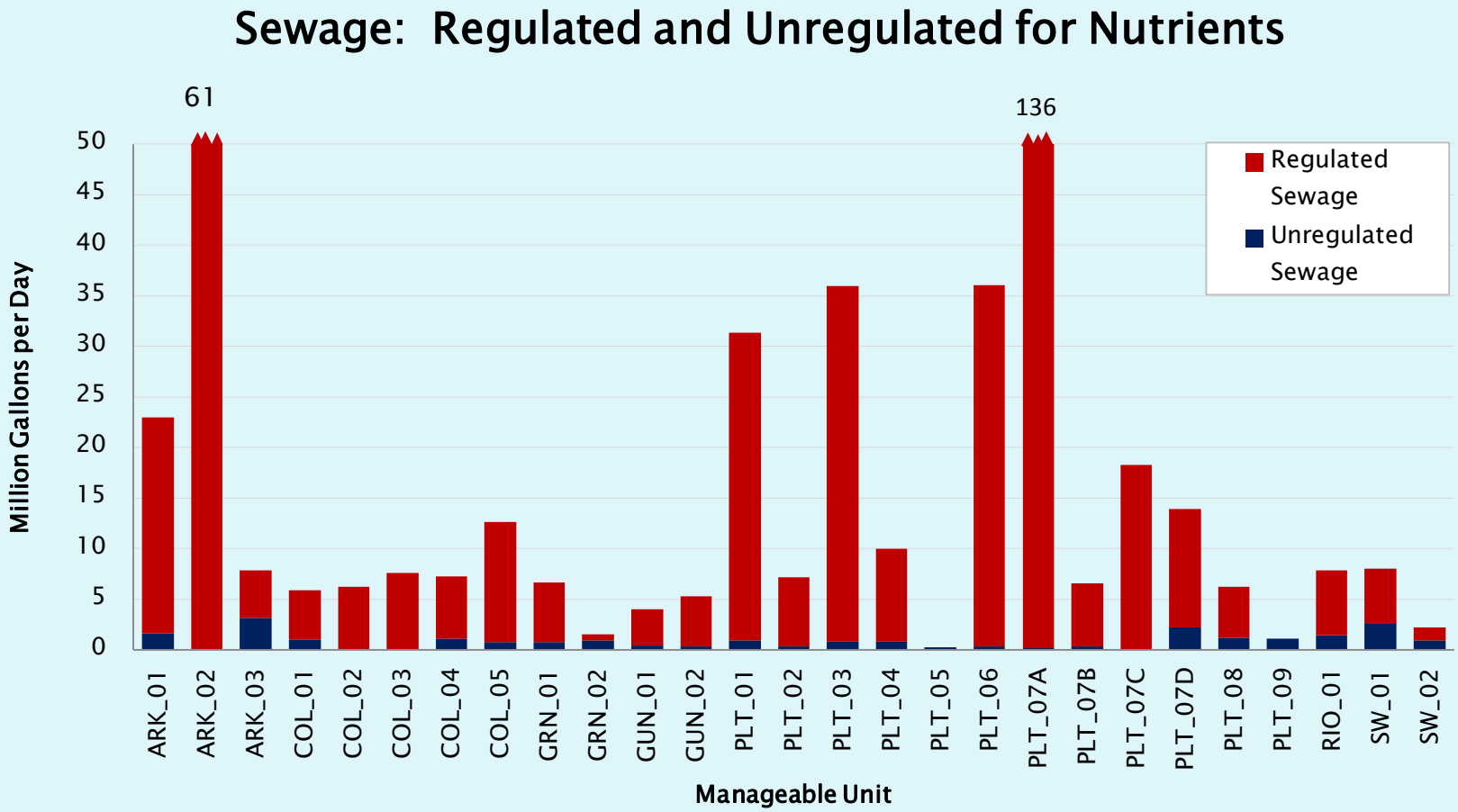
Division Strategy

- Reduces potential future treatment costs 10X
- Balances protection of existing good WQ with improving poor WQ
- Avoids high regulatory/administrative costs for Division and regulated entities
  - – Compared to traditional approach
- Exempts over 260 small and financially disadvantaged communities

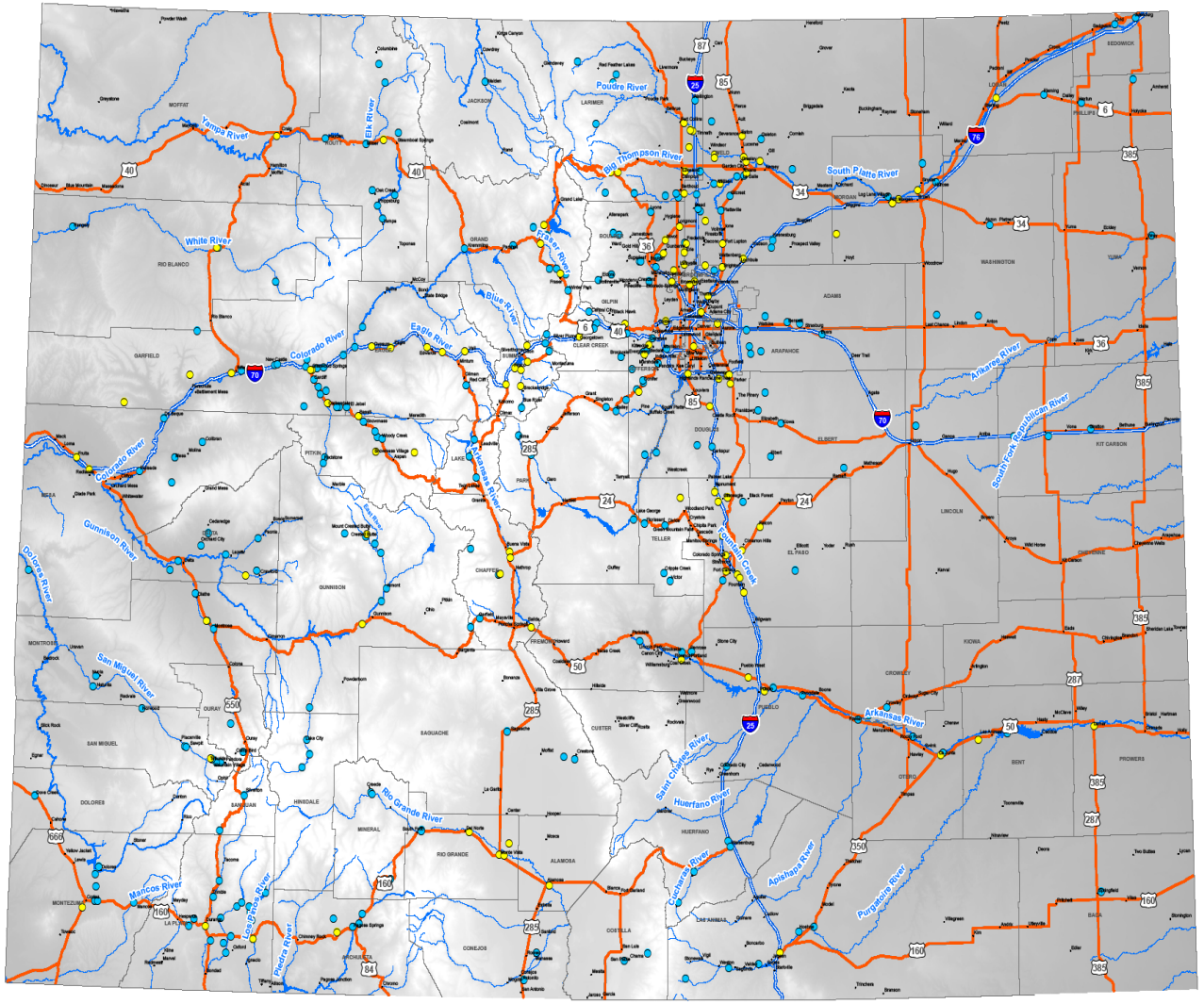
(c) Is structured to avoid unnecessary regulation and minimize the fiscal impact



(c) Is structured to avoid unnecessary regulation and minimize the fiscal impact



Cost Benefit Study Facilities



Date: 1/19/2012
Author: Scott McGowan
Path: L:\Project\NutrientDischargers\NutrientDischargersBig.mxd

Use constraints: There are no restrictions and legal prerequisites for using this data set. The state of Colorado assumes no liability to the completeness, correctness, or fitness for use of this data set.

Colorado Department of Public Health and Environment

(d) Is designed to address basin-specific conditions

- Cost benefit study divided state into 27 manageable units (sub-basins)
  - Based on numbers and types of wastewater and drinking water facilities
- Assess WQ impacts and costs/benefits on a basin or smaller scale
- Paints a basin-specific picture of cause and effect
- Division used information to propose an alternative to limit regulation to certain basins

(e) Complies with Executive Order 5

- Proposal would implement a Federal requirement
- Mailing/e-mail to solicit input Sept., 2011
- Governor's EO-5 process – Posted on Web Site in December 2011
- – Mixed feedback

Boulder Creek

Conclusions

- Nutrients the biggest WQ challenge of the last 20 years
- Over 10 years invested in developing a Colorado-specific approach different than past practice
- Implementation of controls will take longer than other pollutants
- Projected 36% population growth in Colorado over next 30 years will increase nutrient impacts

Questions