

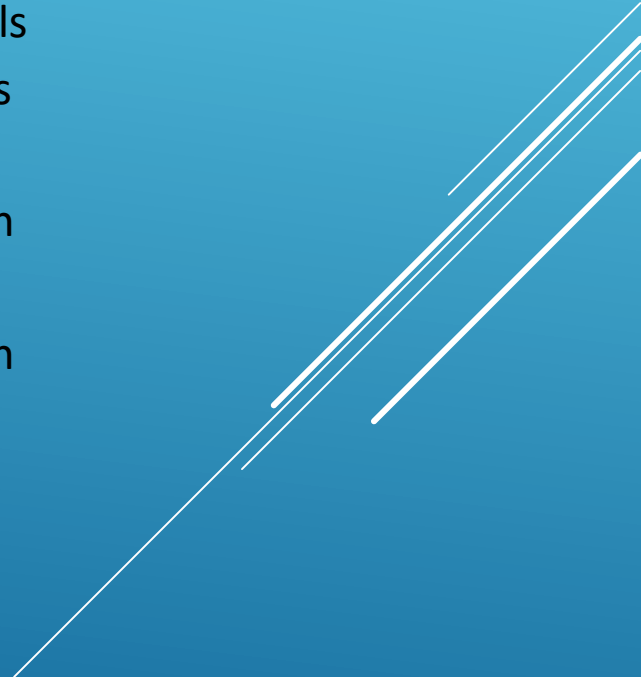
# SPOKANE DISSOLVED OXYGEN TMDL ADVISORY GROUP MEETING

Dec. 6, 2016

10:00 am – 12:00 pm

Spokane County Water Resources Center

# AGENDA

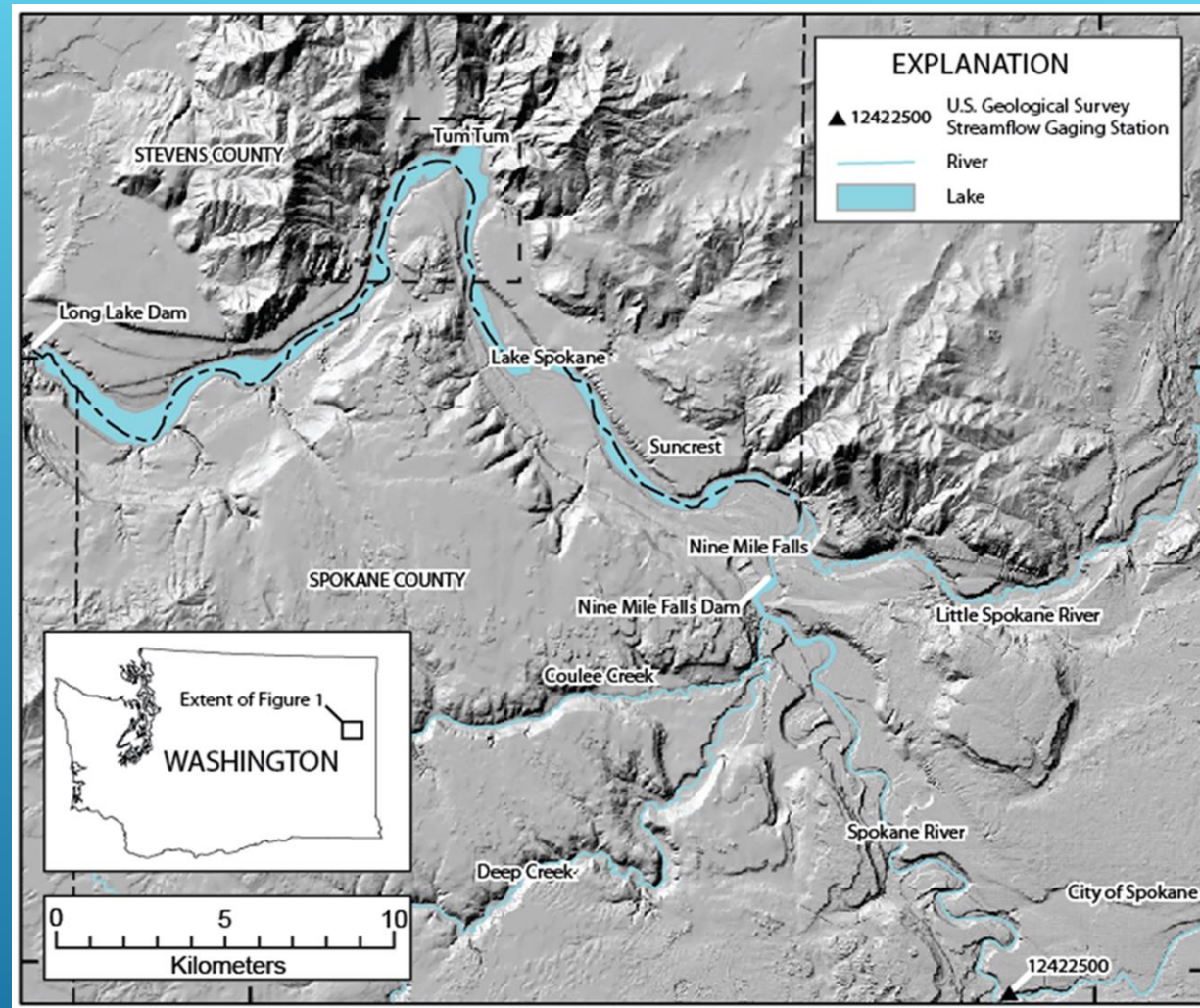
- I. Welcome and Introductions
  
  - I. Updates
    - a. NPDES Permit Update Pat Hallinan
    - b. Monitoring Work Group Karin Baldwin
    - c. USGS Groundwater Study Funding Karin Baldwin
  
  - I. How the CEQUAL Model was applied to the Spokane Dr. Scott Wells  
Dr. Dave Dilks
  
  - I. Literature Review Scope of Work Karin Baldwin
  
  - I. Pathway to 10-Year Assessment Karin Baldwin
  
  - I. Zinc Inhibition Jim Ross
  
  - I. Action Items and Next Meeting All
- 

## Model Questions

- a. 'Model Updates' – Jim Ross mentioned there were model updates, eg., algae ratios. Can we get more information?
- b. New EAP studies – how will new data from EAP studies be integrated into the model
- c. How will new real data collected in the Lake and in the River be integrated into the model
- d. Non-point source load allocations – will the model be used to assess success in meeting non-point allocations?
- e. What data exist for non-point sources? Can those data be used to assess success?
- f. Calibration – How will new data (see below) be incorporated and will there be a need to re-calibrate?
  - Lake Bathymetry (1974 vs. 2009)
  - Phosphorus concentration in groundwater (USGS Study)
  - Phosphorus concentrations in 6 lake stations (data from 2010-2016)
  - Flows from Deep Creek
  - Bioavailable Phosphorus (model application)
  - Phosphorus concentration at the riverine compliance point and river locations
  - Flows specified in the new FERC license
  - Storm water and CSO input loads
  - New City data post-infrastructure improvements

MONITORING WORKGROUP





# USGS GROUNDWATER STUDY FUNDING

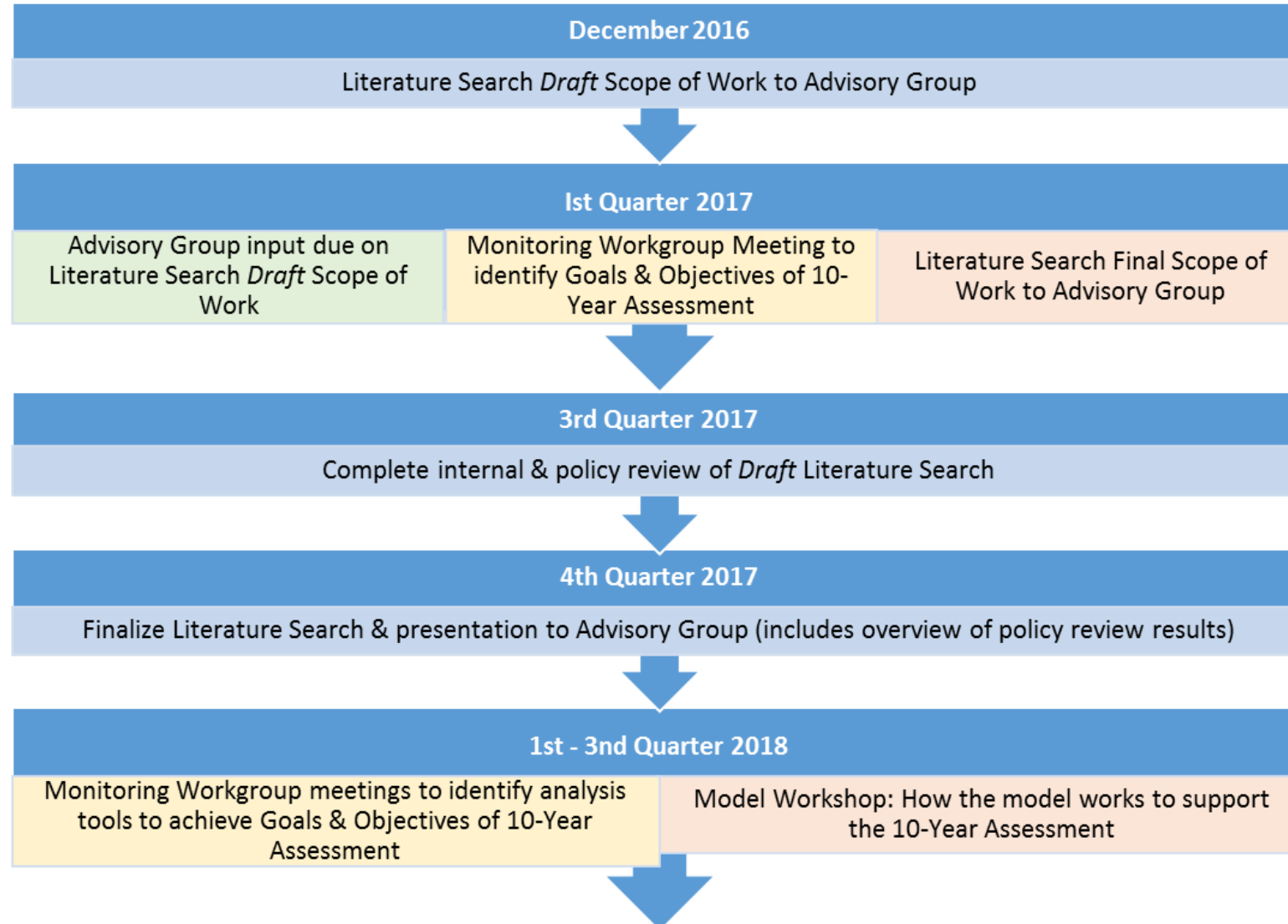
LITERATURE REVIEW DRAFT SCOPE OF WORK

The image features a solid blue background with a gradient from light to dark. In the bottom right corner, there are several white, parallel diagonal lines of varying lengths, creating a modern, abstract graphic element.

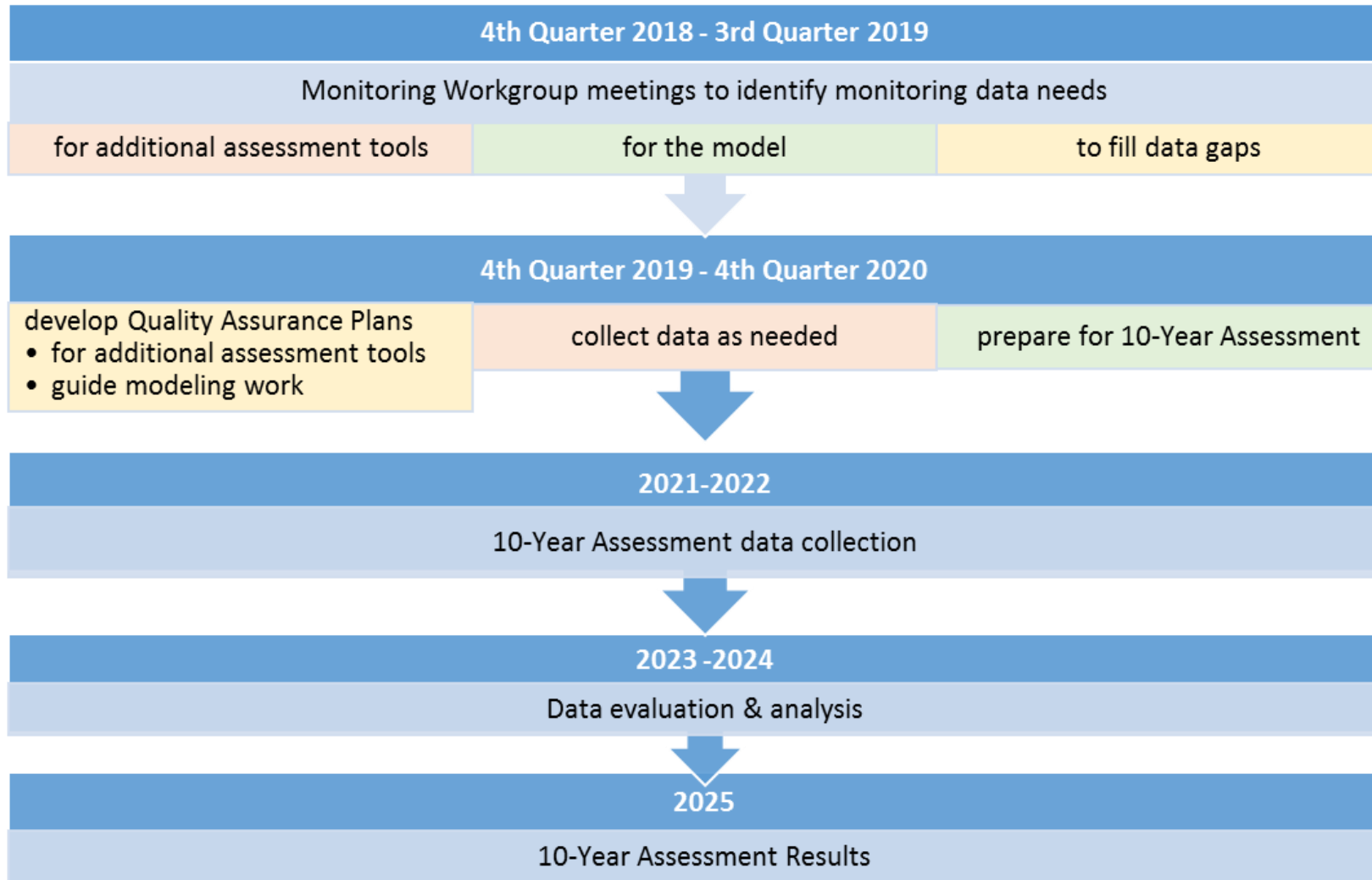
# PATHWAY TOWARD THE 10-YEAR ASSESSMENT



# DRAFT Work Plan Toward 10-Year Assessment







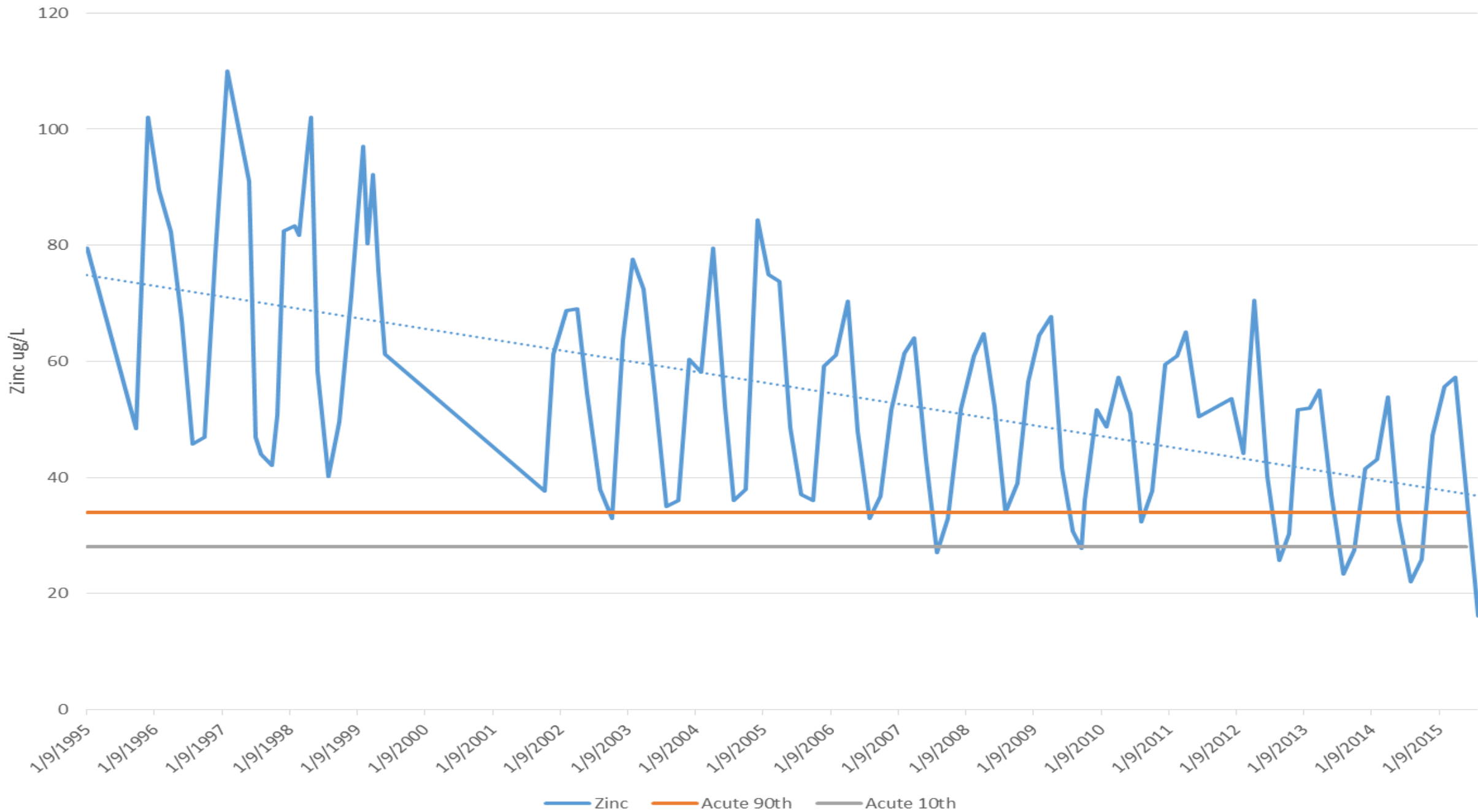
ZINC INHIBITION



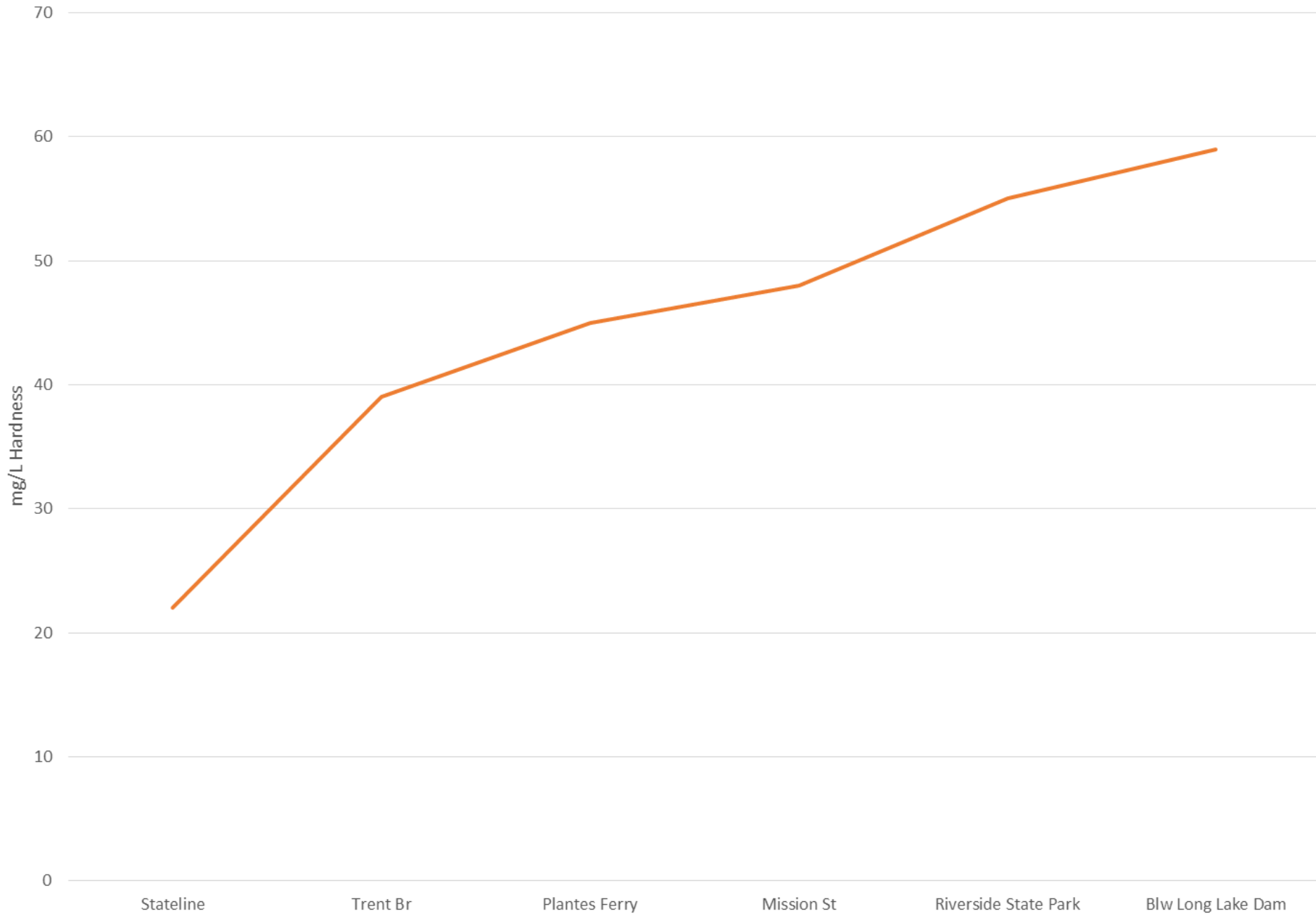
## Zinc freshwater criteria for Washington

Acute (CMC)	$0.978e^{0.8473[\ln(\text{hardness})]+0.8604}$	
Chronic (CCC)	$0.986e^{0.8473[\ln(\text{hardness})]+0.7614}$	

# Zinc @ Stateline



# Spokane River Average Hardness



June 2010 conditions

Stateline			9 Mile		
Zinc	Hardness	Acute	Zinc	Hardness	Acute
47	21	31	45	35	47

# ACTION ITEMS & NEXT MEETING

