

SRRTTF Technical Activities

Where We've Been, Where We're Going: January 5 Draft

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**Spokane River Regional Toxics Task Force
2014 Workshop
January 13, 2014**

Outline

- Task Force objectives
- Where we've been
- Where we are
- Where we're going

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Objectives: What are We Doing, & Why?

- Primary Task Force objective
 - Identify and implement appropriate actions needed to make measurable progress towards meeting applicable water quality standards
- Associated objective
 - Characterize the sources of toxics in the Spokane River



Phasing of Technical Activities

- Phase 1
 - Gather existing data, identify data gaps
 - December, 2013 workshop
 - Prepare a monitoring plan
- Phase 2
 - Collect new data
- Phase 3
 - Analyze data and characterize sources
- Phase 4
 - Assess potential BMPs and develop Comprehensive Plan



Where We've Been: Phase 1 Findings

- Primary data gaps defined in 2013
 - Sources contributing to stormwater loads
 - Significance of loading from atmospheric and groundwater sources
 - Sources upstream of the Idaho/Washington border
- Conclusions from December 2013 workshop
 - Not feasible to address all gaps at once
 - First year of monitoring should focus on characterizing dry weather sources



Phasing of Technical Activities

- Phase 1

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Phase 2

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Phase 3

- Analyze data and characterize sources

- Phase 4

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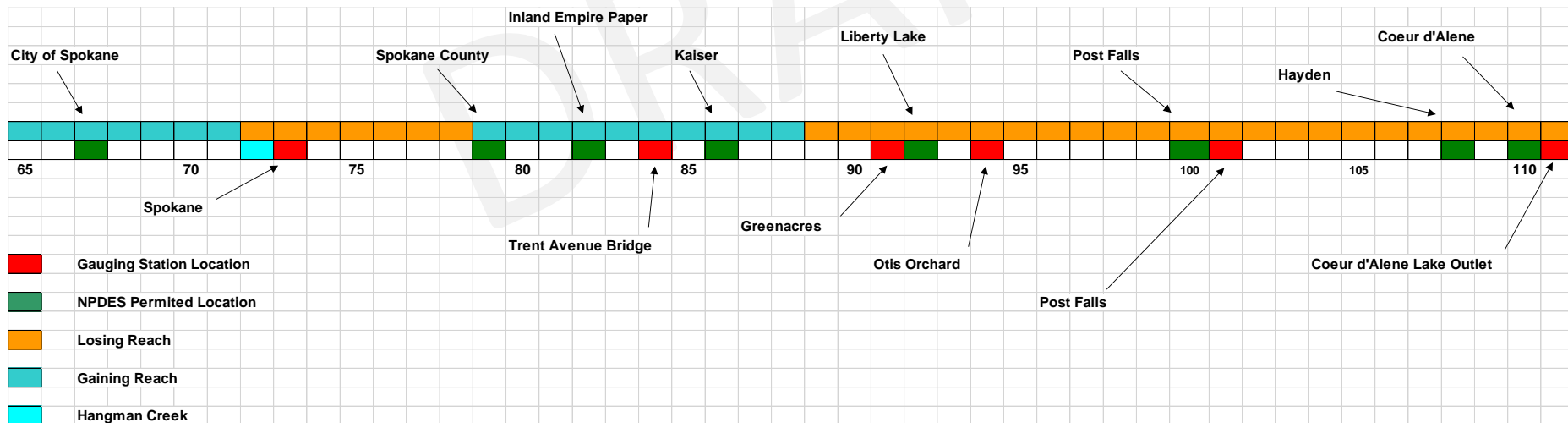
Phase 1 Monitoring Plan Components

- Synoptic Study
 - Support mass balance assessment
- Seasonally Integrated Sampling
 - Provide information on the seasonal variability of loading from Lake Coeur d'Alene
- Confidence Testing
 - Can we expect to get meaningful results from standard grab sampling?



Intent of Synoptic Survey

- Support mass balance assessment
 - Measure river concentration at flow gaging locations
 - Measure all known dry weather sources
 - Identify unknown sources between each station
- Unknown source = Downstream load – Upstream load – Known Load



Seasonally Integrated Sampling

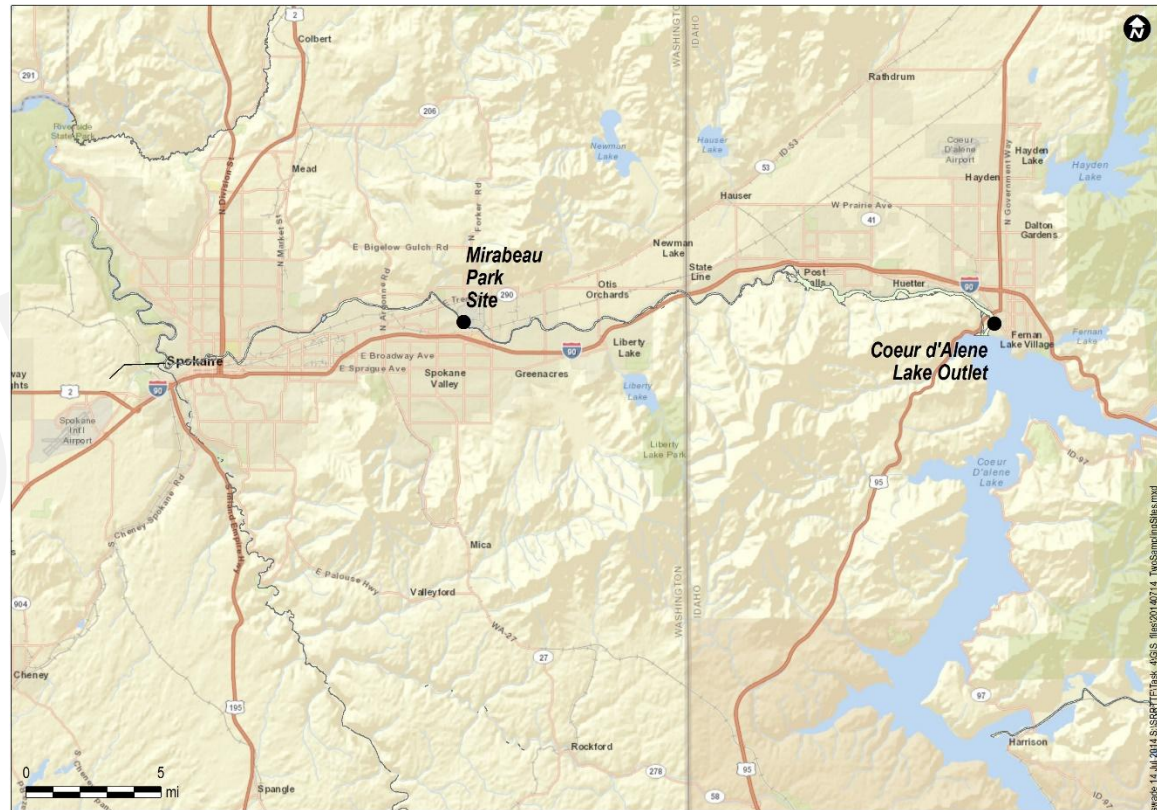
- Provide information on the seasonal variability of loading from Lake Coeur d'Alene
 - Spring high flow
 - summer low flow
 - winter moderate flow

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Confidence Testing

- Determine if meaningful results can be expected from standard grab sampling
 - Conducted in conjunction with seasonally integrated sampling
 - Two locations sampled May 13-19, 2014



Confidence Testing Results

- Concentrations were low (8-80 pg/l) and at similar levels as blanks (8-54 pg/l)
- Synoptic survey not expected to satisfy objective of supporting a rigorous mass balance assessment



Confidence Testing Results

- River concentrations expected to be higher during summer survey
 - Much lower river flows means much less dilution of PCB sources
- In-river “signal” expected to rise above “noise”
 - Especially as we move downstream



Confidence Testing Conclusions

- Synoptic survey still of value
 - Capable of identifying presence of larger sources
- Data quality objectives modified
 - Support a semi-quantitative mass balance assessment, i.e. be able to identify if and where significant unknown sources exist
 - Support an adaptive management approach
 - Provide grab sample results that can be directly compared to results from other sampling methods



Where We're Going

- Define appropriate next steps
- Workshop segments
 - Review analytical methods
 - Discuss sampling results
 - Mass balance assessment

