

# Foundational Concepts for the Spokane River TMDL Managed Implementation Plan

June 30, 2006

The Spokane River does not have enough dissolved oxygen (DO) during the months of April through October to meet current Water Quality Standards. The best available science shows that excess phosphorus is the main cause of this problem. There is agreement among those who petitioned Ecology in 2004, other interested parties and Ecology that actions are needed as soon as possible to improve the River's condition, and, by assuring treatment capacity for septic tank discharges, further protect the quality of the Spokane Valley – Rathdrum Prairie Aquifer. Low dissolved oxygen also results from carbonaceous biochemical oxygen demand (CBOD) and ammonia. For the purpose of implementing the Spokane River Dissolved Oxygen TMDL, it is assumed that efforts to control phosphorus will also serve to control CBOD and ammonia. Reducing significant amounts of phosphorus in the River during the April-October season and achieving Water Quality Standards for dissolved oxygen are the goals of the Spokane River Dissolved Oxygen TMDL Managed Implementation Plan (MIP).

In the October 2004 *Draft Total Maximum Daily Load to Restore and Maintain Dissolved Oxygen in the Spokane River and Lake Spokane (Long Lake)*, Ecology estimated a reduction target of approximately 208 pounds/day of phosphorus from point sources, non-point sources and other controllable sources. Most of this reduction is anticipated to come from improvements in point source wastewater treatment technology located between the Idaho state line and the Lake Spokane Dam.

The best available science conclusively demonstrates significant phosphorus reductions will improve DO in the River and Lake Spokane. How the River will respond to significant phosphorus reductions, the full extent of the reductions necessary to alleviate DO deficiencies, and the phosphorus reductions possible over the next 20 years are not precisely clear at this time. Hence, an aggressive, managed approach that removes phosphorus from a variety of sources through a variety of methods and monitors and assesses the impacts on DO over the next 20 years is a reasonable way to maximize the effectiveness of the sizable investments necessary to improve the River.

## ***Capsule Summary of Approach***

Currently there is not well-established technology that can reliably treat a variety of wastewater discharges and achieve the River phosphorus levels required to improve DO sufficiently to meet Water Quality Standards. There is, however, technology that significantly reduces phosphorus from effluent and that can bring current discharges much closer to the levels required by Water Quality Standards. The Spokane River Collaboration refers to the difference between what technology improvements can achieve and the TMDL levels to meet Water Quality Standards as "the Delta."

The MIP provides reasonable assurance that Water Quality Standards can be achieved during the first ten years of MIP effort by installing the most effective feasible

phosphorus removal treatment technology and completing a planned and scheduled group of actions aimed at eliminating the Delta. The foundational concepts described here will begin guiding TMDL implementation when accepted by Ecology and affected National Pollutant Discharge Elimination System (NPDES) permit holders.

While phosphorus reductions from technology improvements and other actions can be estimated, their true impact on DO requires actual implementation experience and resultant measurement of DO levels in the River and Lake Spokane. The first ten years of MIP efforts need to be in place and operational prior to their consequences being fully assessed. A thorough assessment after the 10<sup>th</sup> year of the MIP will provide the information necessary to guide actions for a second ten year MIP period. These second period actions will include continuation of successful actions conducted in the first 10 years, such as operation of the treatment technology and other permanent phosphorous reduction efforts, and they could include new actions such as consideration of river oxygenation and/or reconsideration of Water Quality Standards applied to the River and Lake Spokane. The MIP's actions necessary to eliminate an NPDES permit holder's Delta will be enforceable over the 20 year life of the MIP and the TMDL phosphorous waste load allocation will become enforceable requirements at the end of the 20 years covered by the MIP.

During the MIP term, the NPDES permits applicable to individual dischargers will include interim limits and other requirements as described below in the section titled "*NPDES Permit Cycle.*"

### ***Ecology Will Complete the Dissolved Oxygen TMDL Consistent with the Foundational Concepts***

The foundational concepts in this document are the result of substantial deliberation by the Spokane River Collaboration. This effort placed completion of the Draft TMDL "on hold" prior to its being made final and submitted to the Environmental Protection Agency for review. Ecology will re-draft the Draft Spokane River Dissolved Oxygen TMDL to include a MIP consistent with the principles described here. The re-draft will be subject to the same public review process and administrative procedures used for the earlier Draft TMDL. As well, Ecology will continue to work on a government-to-government basis with the Spokane Tribe of Indians to ensure compliance with downstream Tribal water quality standards.

### ***Waste Load Allocation Targets***

A TMDL requires waste load allocations (WLA) for the affected NPDES permit holders. These targets, expressed in concentrations in the draft TMDL, will be slightly revised in the re-drafted TMDL to reflect upstream permitting in Idaho and an April-October rather than June-October critical period (see the boxed table on page 24, Draft Total Maximum Daily Load to Restore and Maintain Dissolved Oxygen in the Spokane River and Lake Spokane, October 2004). The total phosphorus concentrations, as allocations in the TMDL rounded to the nearest microgram will remain 10µg/l.

In the MIP, however, the 10 µg/l total phosphorus targets will be expressed as pounds of phosphorus discharge in the River based on the discharge volume estimates established through the Collaboration. The translation from concentration to pounds of phosphorus forms the basis for measuring success in meeting each phosphorus waste load allocation target under the MIP. Success in meeting the pounds of phosphorus target will be achieved by the installation of the most effective feasible phosphorus removal treatment technology **and** implementation of other phosphorus reduction actions that **together** result in the net pounds of phosphorus discharged to the River by the dischargers being equal to or less than the target pounds. The following table shows the pounds per day phosphorus targets for each Washington State NPDES permit holder as they will be expressed in the MIP based on projected flows for 2017 and 2027 using estimates produced through the Spokane River TMDL Collaboration.

Discharger	Projected 2017 WWTP Influent (mgd) <sup>a</sup>	2017 Target Phosphorus (lbs/day) <sup>b</sup>	Projected 2027 WWTP Influent (mgd) <sup>a</sup>	TMDL WLA Phosphorus (lbs/day) <sup>b c</sup>
Liberty Lake	1.41	0.12	1.51	0.13
Kaiser Aluminum	15.4	1.29	15.4	1.29
Inland Empire Paper	4.1	0.34	4.1	0.34
City of Spokane:				
- from City of Spokane only	36		41.77	
- from Spokane County	5.76		9	
- from Airway Heights	0		0	
Total City of Spokane	41.76	3.49	50.77	4.24
Spokane County (new plant)	8	0.67	8	0.67

NOTES:

<sup>a</sup> Influent flow projections based upon data from Flow & Loading Work Group and dischargers

<sup>b</sup> lbs/day for point sources = Influent MGD x 10 µg/L P x 0.0083454

<sup>c</sup> MIP achieves Waste Load Allocation by 2027

The “(lbs/day)” numbers listed above will be used as the target pounds to determine each NPDES permit holder’s Delta. An NPDES permit holder’s Delta is the actual pounds of phosphorus discharged per day minus the target pounds. NPDES permit limits will be based on a seasonal average with appropriate daily, weekly, and monthly limits that recognize the uncertainties and start-up complexities of new treatment technology.

The 2017 phosphorus targets are goals during the first ten years of the MIP. These phosphorus targets will not be binding during the first ten years so as to allow assessment of the beneficial impact on DO from all MIP-related technology improvements and phosphorus reduction actions initiated during this time, and to allow

measurement of the actual Delta reduction by the dischargers based on experience. By the end of the 20<sup>th</sup> year, NPDES permit holders are required to be in compliance with the phosphorus WLA in the right hand column of the chart above.

Once an NPDES permit holder demonstrates reliable ability to continually meet its target, either by treatment technology or technology combined with actions to eliminate the Delta, that permit holder will have met its responsibilities for meeting waste load allocations as expressed in either the MIP or the TMDL.

Aggressive efforts, initiated as quickly as possible, to reach the targets during the first ten year period of the MIP are required. These efforts will include both phosphorous removing treatment technology upgrades and a suite of other phosphorus reducing actions from the list of “target pursuit actions” described below.

Some aggressive programs to meet phosphorus targets may be conducted jointly by several dischargers. These efforts need to result in assignment of reduced pounds of phosphorus to individual dischargers because dischargers must meet individual targets. A trading program of dischargers’ demonstrated surplus phosphorus may be implemented consistent with EPA guidelines pending Ecology’s verification of any surplus phosphorus offset pounds.

As part of the implementation of the MIP, each National Pollution Discharge Elimination System permit holder in Washington State covered by the Spokane River Dissolved Oxygen TMDL will, in accord with the section titled “*Schedule of Activities*,” prepare a technology selection protocol and an Engineering Report with construction schedule for the treatment technology improvements the permit holder intends to install. The permit holder will also prepare a Delta elimination plan with a schedule of target pursuit actions (see details below) that, in combination with the technology improvements, provide reasonable assurance the April-October phosphorus target will be achieved in the first 10 years of the MIP. The ways these targets and associated requirements will be reflected in each NPDES permit is explained in the section below titled “*NPDES Permit Cycle*.”

### ***Target Pursuit Actions***

Target pursuit actions are the steps that are either required or available for NPDES permit holders to both upgrade their technology and eliminate their Delta within the first 10 years of the MIP in order to provide reasonable assurance of meeting targets. The target pursuit actions may be modified as a result of the 10<sup>th</sup> Year Assessment. Dischargers without a Delta do not need to perform target pursuit actions for Delta elimination.

Technology selection protocols and Delta-eliminating target pursuit actions will both be initiated as soon as possible, and Delta-eliminating actions will not be deferred until technology improvements are actually selected and installed.

Enforceable terms of each NPDES permit will include the obligation to meet the interim or final effluent limit and the obligation to complete implementation of the target pursuit

actions, although the details of the target pursuit actions may be set forth in a separate administrative order.

After the 10<sup>th</sup> year of implementation, a thorough review (see the section titled “*Tenth Year Assessment*”) will be conducted to determine what, if any, additional phosphorus reduction actions are necessary, what actions should be continued or discontinued, and/or whether any changes to the phosphorus reduction goal in the TMDL or the Water Quality Standards for DO in the River and Lake Spokane are warranted. By the end of the 20<sup>th</sup> year of the MIP, NPDES permit holders are required to be in compliance with the then current TMDL phosphorus waste load allocations (the targets may have been modified as a result of the Tenth Year Assessment) to assure applicable Water Quality Standards are being met.

**Required Actions:** Required target pursuit actions for each NPDES permit holder with a Delta are as follows:

- ***Technology Selection Protocol:*** NPDES permit holders will prepare, and submit to Ecology for approval, a comprehensive technology selection protocol for choosing the most effective feasible technology for seasonally removing phosphorus from their effluent with an objective of achieving a discharge with seasonal average 50µg/l phosphorus or lower. If pilot testing is a part of the protocol, there will be appropriate provisions for quality assurance and control. The protocol will include a preliminary schedule for construction of the treatment technology.
- ***Delta Elimination Plan:*** In addition to the technology selection protocol, NPDES permit holders will also prepare and submit for Ecology’s approval a Delta elimination plan and schedule for other phosphorus removal actions such as conservation, effluent re-use, source control through support of regional phosphorus reduction efforts (such as limiting use of fertilizers and dishwasher detergents), and supporting regional non-point source control efforts to be established. The plan, in combination with the phosphorus reduction from technology, will provide reasonable assurance of meeting the permit holder’s target in ten years.
- ***Expeditious Decision:*** Ecology will expeditiously review and decide on the proposed technology selection protocol, preliminary construction schedule and Delta elimination actions.
- ***Engineering Report:*** After a permit holder implements the technology selection protocol, the permit holder will prepare, and submit to Ecology for approval, an Engineering Report concerning the chosen technology, including any updates to the construction schedule. The Engineering Report will (if necessary) be accompanied by amendments to the schedule and substance of the target pursuit actions so that in combination with the Engineering Report on expected technology performance, there is reasonable assurance

of meeting the target in ten years. Ecology will expeditiously review and decide on these submittals.

- **Interim Limits:** When new treatment technology is installed, Ecology will set interim phosphorus permit limits based on the engineering reports. It is recognized that, because modern phosphorus removal technology is challenging, achieving normal, and routine operation may require two years, assuming average seasonal conditions (temperature and flow) during both years. During this period, Ecology will recognize these conditions and their effects on compliance with interim discharge limits.
- **Final Limits:** Final limits applicable during the remaining term of the MIP will be set based on the actual performance of the technology installed and operated at optimum reliable efficiency (see the section titled “*NPDES Permit Cycle*”).
- **Investment Stability:** The investment in phosphorus removal technology is recognized by Ecology as having a 20-year life, and no significant modifications or replacements of phosphorus removal facilities will be required during the term of the MIP. Modifications to installed technology that best available data indicate would enhance phosphorus removal performance and are efficient and cost-effective may be required.
- **Conservation:** Public NPDES permit holders, in cooperation with water purveyors, will as soon as possible develop individual and regional programs that reduce flows by funding “LOTT-style” indoor conservation efforts that target 20% water conservation per household in older urban areas and 10% water conservation per household in newer (post 1992) urban areas. These programs will have local ordinances, avoided cost investment principles and per connection expenditures similar to the LOTT program. To the extent these actions are demonstrated as reducing phosphorus loading to the river, they will be recognized as contributing toward achieving phosphorus waste load targets.
- **Class A Effluent:** Each publicly owned treatment plant covered by the Spokane DO TMDL will, through their technology updates, produce effluent meeting the State of Washington Class A reclaimed water quality standards in place when the MIP takes effect.

**Available Actions:** The following target pursuit actions are not required of every NPDES permit holder with a Delta. The non-point source program, however, needs to have sufficient participation to achieve the TMDL-required phosphorus reduction.

- **Reclaimed Water:** Publicly owned dischargers may seek to re-use the Class A reclaimed water they produce as result of technology improvements. All reasonable efforts to re-use and/or recharge the aquifer rather than directly discharging it to the River, particularly in the April-October timeframe,

are strongly encouraged consistent with circumstances and opportunities. Ecology will work with each NPDES permit holder and the Washington State Department of Health to prepare approvable permits that enable timely and successful implementation of these opportunities. Specifically, Ecology commits to the following:

- Ecology will assist in permitting re-use efforts by actively coordinating state permitting with the Washington State Department of Health.
  - Ecology will assist dischargers proposing re-use target pursuit actions in assessing whether any water rights/quality impairments might occur and how any impairment might be addressed.
  - Any revisions of Washington State in Class A reclaimed water guidelines or standards in place when the MIP takes effect will serve as a basis for requesting Ecology's reconsideration of an NPDES permit holder's approved target pursuit action plan that relies on re-use target pursuit actions envisioned prior to the revisions.
  - To the extent these water re-use actions are demonstrated as reducing phosphorus loading to the river, they will be recognized as contributing toward achieving phosphorus waste load targets.
- **Regional Phosphorus Reduction Programs:** Privately owned treatment plants may participate with other NPDES permit holders in regional phosphorus reduction programs, such as conservation (see above) and non-point source control (see below). To the extent these actions are demonstrated as reducing phosphorus loading to the river, they will be recognized as contributing toward achieving phosphorus waste load targets.
  - **Bio-available Phosphorus:** NPDES permit holders may seek to prove to Ecology that a certain stable fraction of their phosphorus discharge is not bio-available in the River environment for a time sufficient to consider it not reactive and not a nutrient source. If Ecology agrees, the pounds of phosphorus that are not bio-available will be recognized as contributing toward achieving the total phosphorus waste load target.
  - **Source Control Programs:** To the extent that source control actions to limit phosphorus inputs through regulation of phosphorus-containing products and through enforced phosphorus-limiting pre-treatment ordinances are demonstrated as reducing phosphorus loading to the river, they will be recognized as contributing toward achieving dischargers' phosphorus waste load targets.

- **Regional Non-Point Source Reduction Program:** Participating NPDES permit holders and Ecology will jointly fund and implement a regional non-point source (NPS) phosphorus reduction program at \$2 million/year. The program will begin in the second year of the MIP following completion of an initial study (50% funded by Ecology) to determine the best opportunities for non-point phosphorus reductions.

The regional non-point source program will be designed to achieve the NPS phosphorus reduction identified in the TMDL **and** to contribute to the Delta reduction efforts of the participants, as necessary. If sufficient reduction in NPS phosphorus as determined by the 10<sup>th</sup> Year Assessment has not yet been achieved, the jointly funded and implemented regional NPS program will continue for the second 10 years of the MIP.

The program will be closely managed by the oversight and coordination group described below, and it will be monitored to routinely identify cost-effective strategies and verify actual phosphorus reductions. Resources could be shifted to other more effective actions for phosphorus reduction by mutual agreement with Ecology. Successful phosphorus-reducing actions funded by the NPDES permit holders through the NPS program will be recognized as contributing toward achieving dischargers' phosphorus waste load targets.

- **Septic Tank Elimination Program:** Spokane County may submit to Ecology information and calculations demonstrating the phosphorus removal impact on the Spokane River and Lake Spokane of its Septic Tank Elimination Program. Pending Ecology's expeditious review and decision regarding the information and calculations, the County may, if Ecology approves, use the pounds of phosphorus prevented from reaching the River and Lake Spokane through septic tank elimination as part of any needed offsets for the County's new treatment plant (see the section titled "*New County Treatment Plant*").

**Oversight and Coordination:** The above target pursuit actions require careful monitoring and accounting to assure genuine phosphorus reductions and proper Delta reduction recognition. The following will occur:

- Ecology and the dischargers will immediately collaborate to develop an oversight and coordination group. The intent is to form a collaborative group to oversee and coordinate the required regional actions including, but not limited to, the NPS, monitoring, modeling, reporting and public outreach programs, however the participating entities retain their individual authorities. Ecology and the dischargers will share in the administrative cost of this group.
- The oversight and coordination group, in cooperation with Ecology, will manage the non-point source program described above.
- The oversight and coordination group will implement a monitoring and research program for the River to routinely track and evaluate the amount of

phosphorus removal, the impact of phosphorus reductions and associated improvements on dissolved oxygen levels. Also, there will be additional studies such as those concerning sediment oxygen demand, the efficacy of river aeration/oxygenation, and bio-availability of phosphorus in discharges and other areas that advance the understanding of and refine the science concerning the River's health. Modeling capabilities for the River will also be enhanced by gathering and including sediment oxygen demand data, noting and examining episodic events that contribute to increased phosphorus loading, and other relevant data and by considering current measurement of minimum river flow as adjusted by regulation. Ecology and the dischargers will share in the cost of implementing and operating this monitoring and research program.

- Dischargers will prepare and submit annual reports to Ecology, describing each discharger's performance of the target pursuit actions and any measurable successes. For joint actions (such as the NPS Program), the dischargers may provide a joint report.
- Ecology will prepare annual performance reviews concerning the status of agreed-upon, committed target pursuit actions described above. Every two years Ecology, using monitoring information, will prepare and present a report and, in collaboration with the oversight and coordination group, conduct other public engagement efforts regarding the River's health and the performance and effects of the target pursuit actions described in the MIP.
- Ecology will address Avista Corporation's DO responsibilities through the 401 Certification process.

### ***New Spokane County Treatment Plant***

A new Spokane County treatment plant will be constructed to meet its phosphorus allocation target through a combination of advanced treatment and other offsets that are in place and accepted by Ecology as effective as the plant begins routine, normal (i.e., beyond shakedown or start up) operations. As with the engineering reports and target pursuit action plans and schedules for NPDES permit holders, the County will submit to Ecology for approval the County's engineering report for the plant showing how the most effective, feasible phosphorus removal technology has been selected, and how the offsets will be timely developed. At the time the plant begins normal, routine operations, it is expected the combination of offset actions and the plant's treatment of water to be discharged in the River will together achieve compliance with 10µg/l phosphorus.

Consistent with NPDES requirements, the plant will be permitted by Ecology in order to enable rapid conversion of septic systems to sewers consistent with the approved septic tank elimination program prior to the completion of the County plant. The County will construct the plant within the first 6 years of the MIP as the County's offsets from the target pursuit actions are being developed and made operative. It is recognized that any phosphorous reduction actions selected by the County that rely on the plant

achieving normal, routine operation for their full implementation (such as completing septic tank hookups and/or water re-use) can still contribute to the County's offsets. It is further recognized that, because modern phosphorus removal technology is challenging, achieving normal, and routine operation may require two years, assuming average seasonal conditions (temperature and flow) during both years. During this period, Ecology will recognize these conditions and their effects on compliance with interim discharge limits.

The County will also develop a comprehensive program for reclaimed water production, re-use and aquifer recharge of effluent. This re-use program will be subject to the same conditions described for other re-use target pursuit action plans described above.

### **10<sup>th</sup> Year Assessment**

Following the 10<sup>th</sup> year of the MIP there will be a major assessment of the plan's impact. A collaborative process will be used to make determinations about the relevant actions appropriate for the second 10 years of the MIP. The assessment will be a data-based, objective review designed to assess:

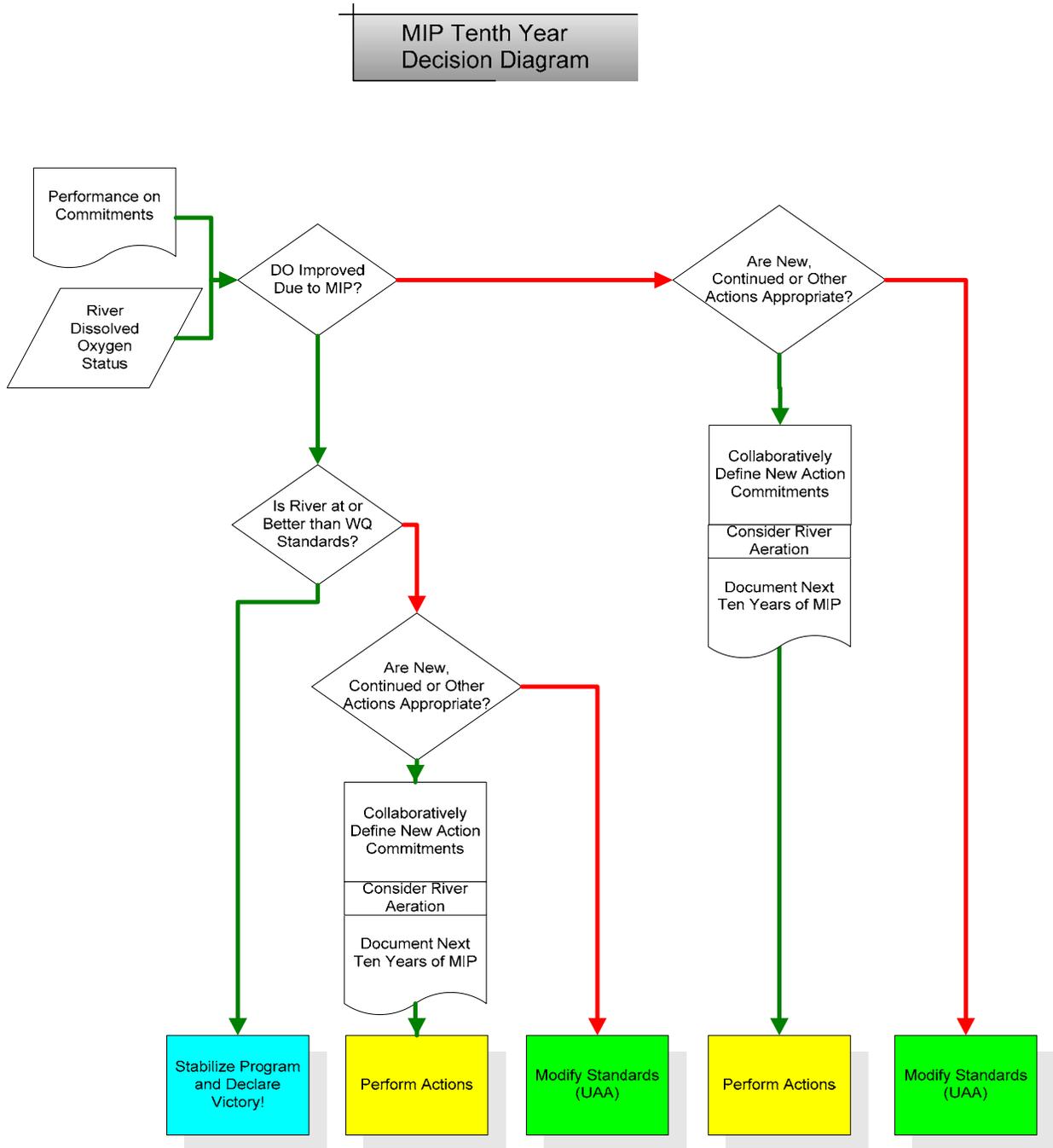
- The amount of phosphorous removed from the River by the actions taken to date compared to phosphorus reduction targets.
- The River response to those reductions and associated changes in DO.
- The necessity, if any, for further reductions in phosphorous, CBOD and ammonia in order to achieve Water Quality Standards for DO.
- The likelihood of further phosphorous reductions occurring in the next 10 years of the MIP if the actions begun in the first 10 years were continued.
- The set of actions that could be initiated in the next 10 years of the MIP that would more likely than not result in further phosphorous reductions, if necessary, to achieve DO Water Quality Standards for Lake Spokane.
- The reasonableness of pursuing these actions and/or the reasonableness of pursuing other strategies such as Lake Spokane oxygenation and/or the appropriateness of modifying DO Water Quality Standards if continuing existing or implementing additional phosphorous removal strategies will more likely than not fail to improve DO sufficiently to meet existing DO Water Quality Standards.

Particular attention will be given to Lake Spokane's hypolimnion (lowest) layer where DO levels may be least likely to be significantly improved by upstream phosphorus reduction.

- Data and actions will be carefully reviewed to determine whether technology improvements and target pursuit actions can result in the hypolimnion meeting DO Water Quality Standards, whether lake oxygenation or other techniques may

be effective in improving DO and/or whether modified Water Quality Standards for this layer are appropriate.

These decisions will be made consistent with the MIP Decision Diagram below.



This assessment will occur following the 10th year of the MIP. The assessment may need to be extended if the timing of the installation of treatment technology has not resulted in operation for a long enough time to produce sufficient data about river conditions and DO response. If this occurs, the assessment would not be completed until there has been at least 3 years of operation of all treatment technology upgrades by all dischargers.

**NPDES Permit Cycle**

Four 5-year NPDES permit cycles are expected to be covered under the MIP. Currently, all four existing NPDES permits are under administrative extensions. Each of the existing NPDES permits will be handled somewhat differently due to varying conditions associated with each discharge.

In general, the NPDES permits will follow this sequence:

<b>Cycle</b>	<b>Term</b>	<b>Permit Elements</b>
I	2007 - 2011	The permit is issued with effluent limits adjusted based on performance history. The permit will state the goal of achieving an equivalent of an effluent phosphorus concentration of 10µg/l phosphorus by the end of the following permit cycle (i.e., in 10 years) through a combination of phosphorus treatment technology and target pursuit actions. Enforceable terms of each NPDES permit will include the obligation to meet the effluent limit and the obligation to start, continue, and/or complete the target pursuit actions. The details of the target pursuit actions may be set forth in a separate administrative order. The permit, depending on date of issue, may also specify dates for submitting a technology selection protocol and an Engineering Report with an estimated construction schedule, all as described in the section titled "Target Pursuit Actions."

<b>Cycle</b>	<b>Term</b>	<b>Permit Elements</b>
II	2012 - 2016	The permit is issued with interim effluent limits taking effect with the completion of technology upgrades. Implementation of the phosphorus target pursuit actions to reduce the Delta is continued during this permit cycle. The permit will state the goal of achieving an equivalent of an effluent phosphorus concentration of 10µg/l phosphorus by the end of the permit cycle (i.e., in 5 years) through a combination of phosphorus treatment technology and target pursuit actions. As in the first Permit Cycle, enforceable terms of the NPDES permit will include the obligation to meet the effluent limit and the obligation to continue and/or complete the target pursuit actions. The details of the target pursuit actions may be set forth in a separate administrative order. The interim limits will be based on the Engineering Report that provides Ecology with reasonable assurance that an equivalent of an effluent phosphorus concentration of 10µg/l phosphorus will be achieved by the end of the permit cycle. It is recognized that, because modern phosphorus removal technology is challenging, achieving normal and routine operation may require two years, assuming average seasonal conditions (temperature and flow) during both years. During this period, Ecology will recognize these conditions and their effects on compliance with interim discharge limits. Operational characteristics for the newly installed technology will be assessed so that final limits can be established.
III	2017 - 2021	The permit is issued with final effluent limits based on observed operational characteristics. The permit will reflect results of the 10 <sup>th</sup> Year Assessment. The permit will state the goal of achieving an equivalent of an effluent phosphorus concentration of 10µg/l phosphorus through a combination of phosphorus treatment technology and target pursuit actions. As in the first Permit Cycle, enforceable terms of the NPDES permit will include the obligation to meet the effluent limit and the obligation to continue and/or complete the target pursuit actions. The details of the target pursuit actions may be set forth in a separate administrative order.
IV	2022 - 2026	The permit is issued with established final effluent limits that, in combination with completed and continuing target pursuit actions, meet the final waste load allocations since they will be enforceable at the end of the MIP.

A Gantt chart version of the anticipated permit cycles for each existing NPDES permit holder plus the permit cycle for Spokane County is included for illustrative purposes as *Attachment A*.

## ***Schedule of Activities to Initiate the MIP***

Based on and consistent with the principles and foundational concepts in this Agreement, several tasks need to be completed as the Spokane River TMDL and accompanying MIP are made final.

These actions include the following:

- Re-drafting of the TMDL, completion of the MIP by Ecology, and submittal of the final TMDL to EPA – target date 1/1/2007
- Submittal to Ecology of technology selection protocols, Delta elimination plans and treatment technology implementation schedule by each discharger – target date 1/1/2007
- Creation of the oversight and coordination structure necessary to implement the actions that will be conducted on a regional scale such as the operation of the NPS and monitoring programs – target date 1/1/2007

Assuming the Foundational Concepts in this paper become an Agreement in Principle that is endorsed by Ecology and the dischargers this summer, and the TMDL is completed by Ecology and approved by EPA, it appears likely the first permitting sequence and the start of the MIP's first ten year period could begin in early 2007. Ecology and the dischargers agree that local elected officials in the Spokane area should share the lead with Ecology in developing the appropriate oversight and coordination structure for overseeing the implementation of the MIP and securing the necessary inter-agency agreements and funding commitments sufficient to support it.

Applying the Foundational Concepts, the Agreement in Principle does not require any party to engage in any future action or make any subsequent decision in violation of established rules and procedures for engaging in such actions or making such decisions. Nothing in this document changes any party's authorities or responsibilities under law or regulation. The parties embracing this Agreement recognize and support that this path forward is the appropriate way to establish the legally sufficient framework for completing the Spokane River DO TMDL and to quickly begin the important work of improving the health of the Spokane River. All parties agree to conduct themselves over the next months and years consistent with these Foundational Concepts and resulting Agreement in Principle so that this can be successfully and efficiently accomplished.



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