

Annual Report
Columbia River Gorge Air Quality Project
September 12, 2006 Presentation

To: Columbia River Gorge Commission (Commission)

**From: Oregon Department of Environmental Quality (DEQ)
Southwest Clean Air Agency (SWCAA)**

Introduction

This memo outlines the key topics as we move beyond the upcoming completion of the Gorge Technical Study to the establishment of a Gorge Air Quality Strategy. In the summer of 2007, the air agencies will provide their recommendation for an appropriate air quality strategy for the Gorge that will meet the charge of the Gorge Management Plan and Scenic Area Act. The agencies will also discuss what outcome the strategy will be designed to achieve, clarify who will be responsible for designing and implementing the strategy, and recommend appropriate roles for the Gorge Commission, other agencies, tribes, stakeholders, and the public.

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I. Gorge Commission Charge to Air Agencies

In May 2000, the Gorge Commission approved an air quality amendment to the National Scenic Area Management Plan. The amendment language states that:

Air quality shall be protected and enhanced, consistent with the purposes of the Scenic Area Act. The States of Oregon and Washington shall: (1) continue to monitor air pollution and visibility levels in the Gorge; (2) conduct an analysis of monitoring and emissions data to identify all sources, both inside and outside the Scenic Area that significantly contribute to air pollution. Based on this analysis, the States shall develop and implement a regional air quality strategy to carry out the purposes of the Scenic Area Act, with the U.S. Forest Service, the Southwest Air Pollution Control Authority [now the Southwest Clean Air Agency] and in consultation with affected stakeholders.

The States and the Forest Service together shall provide annual reports to the Commission on progress made regarding implementation of this policy. The first report shall include a work plan and timeline for gathering/analyzing data and developing and implementing the strategy...¹

The Gorge Commission adopted the above air quality policy language after a 2000 public hearing in response to a Mid-Columbia Economic Development District (MCEDD) request to remove language requiring that the Scenic Area be studied for Class I designation. The MCEDD submitted a report titled “Review of Atmospheric Visibility in the Columbia River Gorge National Scenic Area” dated June 1997 in support of its request. There was recognition by the Gorge Commission in passing its new policy that while a Class I (wilderness area) designation is not appropriate for the Gorge, there is some potential risk to the resources that must be protected under the National Scenic Area Act. The new air quality amendment language reflects both purposes of the NSA Act.

The Columbia River Gorge Commission has responsibility under the Scenic Area Management Plan to protect natural, scenic, cultural, and recreational resources. It is recognized that the Commission does not have expertise in air quality planning and that they will rely on the Oregon and Washington air quality agencies to develop an air quality strategy for the NSA. However, as the regional policy-making body for the Scenic Area, the Gorge Commission must ensure that any proposed air quality strategy carries out the purposes of the Scenic Area Act. Therefore, in its review of the strategy, the Gorge Commission must find that it is consistent with those purposes before it concurs with the proposed strategy.

II. The Technical Work: Current Status and Meeting the Charge

- A. SWCAA and DEQ (“air agencies”) continue to monitor visibility in the Scenic Area. The agencies have used this data to help identify significant emission sources possibly influencing visibility in the Gorge and will continue to evaluate monitoring data for tracking on-going progress.

¹ Management plan amendment language adopted by the Columbia River Gorge Commission on May 9, 2000. SMA Natural Resources Policy 12 [pages I-123]. Now, January 26, 2004 Chapter 3, Natural Resources, SMA Provisions Number 15, Page I-82.

- B. First Monitoring Study: The Haze Gradient Study report was finalized in March 2006. In summary, the Study found:
- 1) Haziest pattern with winter Downgorge flow (winds from the east) - sources east of Gorge mainly responsible
 - 2) Summer patterns –increased haze as Portland metro area emissions transported through gorge (seen mostly in western-central gorge- much cleaner in eastern Gorge due to dispersion)
 - 3) Light Downgorge- increasing visibility impairment in The Dalles as winds shift from westerly to easterly
 - 4) Winter Downgorge highest visibility impairment at all sites except Steigerwald and Sauvie Island (eastern sites haziest)
 - 5) All sites - Strong Upgorge lowest visibility impairment and large gradient from west to east)
 - 6) Therefore, main summer pattern cleanest, main winter pattern dirtiest
 - 7) Sauvie Island and eastern Gorge sites have greater variation between patterns than other sites
- C. Second Monitoring Study: The draft Causes of Haze in the Gorge (CoHaGo) Study was presented to the Commission in March 2006. Comments were solicited and incorporated into the final version, which was released in August 2006. The conclusions in the final version were consistent with the draft, as summarized below. These findings will be further explored in the modeling phase and any conclusions should wait for the results of the final Gorge Summary Science report noted below.
- 1) Summertime haze – main contributors are organics and sulfate
 - a) Organics mainly from burning
 - b) Sulfate sources include: oil combustion, paper mills
 - c) Portland Metro area contributing significantly in summer
 - 2) Wintertime haze worse than summer - nitrates, sulfates, and organics - sources mainly from the east
 - a) Wood burning and sources to the east of the Gorge are the main contributors
 - b) Some impact of The Dalles noted under certain conditions
 - c) Sulfates and Nitrates are also major contributors to haze (emission inventory sources include coal fired power plant and ammonia from nearby confined animal operations)
- D. Modeling Study: As noted above, the monitoring work is completed and we are now engaged in the modeling analysis. One of the most important outcomes of the modeling work will be the “future look” at Gorge visibility conditions in 2018 and the expected visibility trend. The 2018 forecast is discussed in more detail in Section III below. The 2018 future look will likely reveal a benefit to the Gorge from the currently adopted air quality regulations that are being phased-in over the near term. These currently adopted strategies are a central part of the overall Gorge air quality strategy and are a significant step in meeting the goal to protect and enhance resources.
- E. As part of the current modeling exercise, the agencies will be performing some modeling of various emission source categories to better explore which ones will continue to have a significant influence on Gorge visibility in 2018, which do not, and to identify potential candidates for further investigation of emission reduction strategies. At the August 2005

Commission meeting, we referred to these modeling test cases as “What-if” scenarios. To gain the public’s perspective on which sources should be evaluated, the agencies solicited public comment.

Based upon the public input, agency expertise, and technical viability, the agencies have selected the following list of scenarios to model in the short run. Given budget constraints, up to five from the following list will be modeled to examine their contribution to visibility impairment in the Gorge:

- 1) PGE Boardman, (Outside – East)
- 2) Ammonia sources, including Three-Mile Canyon Farm, (Outside – East)
- 3) On-road (cars and trucks) activity from the Portland/Vancouver area, (Outside – West)
- 4) Major point sources in the Portland/Vancouver area, (Outside – West) and
- 5) Major point sources inside the Gorge. (Inside).

This initial list is consistent with our commitment to geographic equity as it evaluates sources from both outside (west and east) and inside the Scenic Area. It also provides valuable trend information on the likely future effect on visibility conditions of several key emission source sectors. The agencies recognize that the list is not comprehensive. Contingent on funding and FTE availability, some additional examples of “what-if” scenarios could be modeled to support further investigations by a bi-state workgroup, as described in Section III(C), below. Such test-case modeling evaluations could include: Open burning emissions inside and outside the Gorge, Locomotives in the Gorge, Marine/Barge, and mobile sources in the Gorge, Woodstoves in/out Gorge, targeted diesel reduction projects, Regional emissions east/west of Gorge (OR & WA), Aircraft emissions - PDX, Off-shore shipping, Sea salt-Marine Impact, and Increased VMT from a new Casino.

In February 2007, we plan to present the results of the modeling study to the Gorge Commission and hold a public meeting to present the work to the public for final comment. In spring 2007, the Air Agencies will provide a draft analysis of monitoring, emissions and meteorological data, along with modeling results designed to identify sources, both inside and outside the Scenic Area, that significantly contribute to visibility impairment in the Gorge. The agencies plan to release this integrated draft Gorge Science Summary report in early 2007 and we will seek public comment on it.

- F. The final Gorge Science Summary report will be presented at the August/September 2007 Gorge Commission meeting. This report is likely to have more data and insight than any other study performed in the USA with the complex terrain and meteorology of the Gorge. It will provide an understanding of historic trends, enhanced knowledge and understanding of the complex processes that lead to the formation of haze in the Scenic Area, and a better understanding of emission regions, categories, and possible individual sources, both inside & outside the NSA. Most significantly, it will include a projection of visibility conditions for the year 2018 using 2004 meteorology and projected emission changes from reduction strategies (regional haze program, vehicle emission standards, fuel sulfur content, etc.) currently required, but not yet implemented, in whole or in part. It will also consider emission changes due to growth. (Some of the assumptions that will likely be in the 2018 model run can be found at: <http://www.wrapair.org/forums/ssjf/documents/eiccts/index.html>) We will also have a

modeling tool that will be capable of conducting hypothetical analysis to evaluate the impacts or effectiveness of additional emission reduction strategies.

- G. Klickitat County sponsored an August 9, 2006 “Updated Air Quality Trends for the Columbia River Gorge” report, prepared by Kent Norville, Ph.D. We have not yet seen data from the Forest Service’s latest research effort on acidic deposition in soils, which is a follow-up effort to the USFS’s previous “fog water” study. As a result, we are not in a position to comment on it. Neither of the Forest Service studies, nor the Norville Study are a formal part of our DEQ/SWCAA project, but they will be discussed in the final Gorge Science Summary Report, noted in Section II, F, above.)
- H. The agencies and contractors are working diligently to deliver the results of the technical study and make a recommendation regarding a Gorge strategy to the Gorge Commission in August/September 2007. Schedule details are provided in Section VII, below, and are based upon the assumption that model performance testing and other modeling issues come together in the next month or two.

III. An Air Quality Strategy for the Gorge

A. Overview

The air agencies will recommend a regional air quality strategy that, in their judgment, carries out the purposes of the Scenic Area Act. That strategy will include several elements that will all work together to address visibility issues over the long run. The agencies’ approach to future strategy development will include partnerships with the USFS, Gorge area tribes, the public, and affected stakeholders. The agencies are envisioning two major components that will build on the outcome of the current technical study:

B. First Component - 2018 Visibility Projection and Current Strategy Implementation

In 2007, we will provide a look forward (trend forecast) of expected visibility conditions in 2018 based on the currently adopted air quality regulations that are being phased-in over the near term. This look forward will include existing regional strategies that will benefit air quality in the Gorge such as Oregon and Washington Low Emission Vehicle standards and federal requirements for low sulfur fuels. The 2018 forecast will also include the benefits from whatever new emission reduction technologies are required for PGE Boardman under the Regional Haze and Clean Air Mercury programs. These upcoming measures are a central part of the Gorge air quality strategy and are a significant step in meeting the goal to protect and enhance resources.

It is likely that the 2018 look at future visibility conditions in the Gorge will show that the improving trend identified in the latest monitoring analysis by the Klickitat County-sponsored will continue to at least 2018. Below are some examples of the currently (or soon to be) adopted air quality regulations that are being phased-in over the near term and that will be accounted for in the agencies’ 2018 projection:

1. Regional Haze

Regional Haze is a federal program required by the Clean Air Act to improve visibility in the nation's wilderness areas and national parks (E.g. Mt. Hood, Mt. Adams, and Crater Lake). Oregon and Washington must develop regional haze plans by December of 2007. One of the key plan elements is to address the contribution of older industrial facilities to haze. DEQ has begun a process of identifying all industrial sources that could be subject to the Best Available Retrofit Technology (BART) requirements under the federal Regional Haze Rule. WDOE and SWCAA have begun a similar process with EPA. Under BART, certain older sources (over 250 tons potential to emit, built between 1962 and 1977) must be evaluated to see how much they contribute to haze in Class-I wilderness areas, and if retrofitting with emission controls is feasible and cost effective. PGE has volunteered to go first and analyze the impacts of the Boardman facility under the regional haze rule. PGE offered to fast-track the analysis for Boardman, which will be a pilot for all other BART sources in Oregon. PGE has started collecting information on emission control options, and has said that it expects additional controls to be required in order to reduce haze-related emissions from Boardman. Any emission controls needed to address BART will be developed in concert with the mercury control technology requirements currently being finalized as part of Oregon's Clean Air Mercury Rule (CAMR). DEQ has been working with PGE to evaluate a multi-pollutant approach to BART and mercury.

2. Oregon Low Emission Vehicles and Washington's Clean Cars Program

Beginning with model 2009 vehicles, all new passenger cars and light and medium duty trucks sold in Oregon and Washington will be required to meet stricter vehicle emission standards. The new emission standards will provide additional emission reduction benefits above and beyond federal vehicle emission standards. These additional reductions are shown below for the year 2020. For example, the new OR-LEV and WA-LEV standards will provide an additional 30% reduction (approx) in NOx beyond what would be achieved by federal standards alone. NOx is a key pollutant involved in both visibility degradation and acidic deposition.

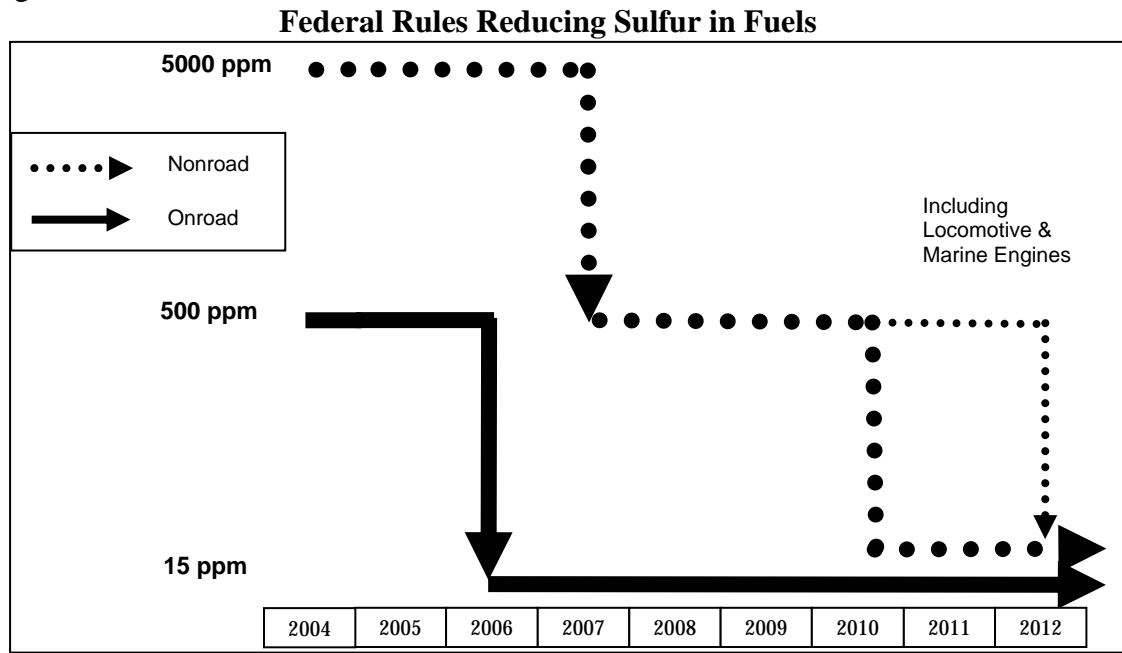
Expected additional emission reduction benefit beyond federal standards in 2020

Pollutant	Oregon Reduction	Washington Reduction
CO	15%	9%
VOC	12% - 21%	18% - 25%
NOx	30% - 33%	30% - 31%
Toxics	22% - 38%	30% - 43%

3. Clean Fuels/Low Sulfur Fuels

EPA's clean diesel fuel rules require a 97% reduction in the sulfur content of diesel fuel (which will reduce SOx emissions), and "ultra low" sulfur diesel fuel will become available beginning in fall 2006. Model year 2007 and later highway diesel engines and diesel vehicles will be equipped with advanced emission control devices and must use ultra low sulfur diesel fuel. It is expected that EPA's clean diesel programs will reduce 2.6 million tons of NOx nation-wide each year and diesel particulate pollution (PM) will be reduced nationally by 110,000 tons per year. The benefits of low sulfur fuels and cleaner diesel vehicles will be reflected in the Gorge

2018 future look. SO_x and fine particulate are key pollutants involved in visibility degradation.



C. Second Component – Additional Future Strategy Development

The first component of the Gorge strategy described above will reflect a variety of existing emission reduction measures that will benefit the Gorge, as well as the additional emission reductions achieved through the Regional Haze and Clean Air Mercury Programs. It is likely that the 2018 look at future visibility conditions in the Gorge will show that the improving trend identified in the latest monitoring analysis by Klickitat County will continue to at least 2018. There is however, a desire to establish a second component to the Gorge strategy that looks beyond existing strategies in order to facilitate continued visibility improvement in the Gorge, monitor trends and progress, and address emerging issues. To establish this second facet of the Gorge strategy, the air agencies are exploring the development of a strategic collaborative process to:

- a) Track and report on-going visibility trends,
- b) Track implementation and effectiveness of current emission reduction initiatives,
- c) Explore possible additional future emission reduction initiatives, and
- d) Address emerging issues with collaboratively-developed strategies.

We believe that this strategic process, budget permitting, will be best served by a governor-created, bi-state collaborative group. Alternatively, but less desirable, it could be convened by the Gorge Commission, air agencies, or others. Both options are budget and FTE contingent.

In pursuit of the preferred governor-sponsored alternative, the air agencies are currently in discussions with the National Policy Consensus Center (NPCC), which is housed at Portland State University, to explore the formation of a bi-state group to focus on developing new voluntary emission reduction projects to facilitate continued air quality improvement in the Gorge. If both Oregon and Washington governors, the federal government, tribes, and others agree, this second component of the Gorge strategy could be developed collaboratively by a workgroup of stakeholders as a bi-state “Gorge Solutions Group” (modeled after the existing bi-state “Lower Columbia Solutions Group”). This

stakeholder group, which could include one or more Gorge Commissioners, would have available to it, the results of the technical study and research from the USFS' assessment of acid deposition. What this group would explore will depend on the forecast of 2018 visibility conditions and the charge from the Oregon and Washington governors: fewer new collaboratively developed measures will be needed if air quality is predicted to improve, and more new measures will be needed if air quality is predicted to get worse or improve too slowly. A full array of collaboratively developed projects for continued visibility improvement could be explored. It is important to recognize that major emission reduction strategies are already in place and more are coming on-line in the near future. The available strategies that remain for exploration are not as likely to produce the same level of reductions and they will be harder to obtain.

Some possible projects and areas of investigation for a bi-state collaborative group include:

- 1) Native American rock image and ecosystem issues,
- 2) Alternatives to reducing open burning (e.g. yard debris composting, or other alternatives to burning),
- 3) Removal of non-certified woodstoves upon sale of home, or other projects to accelerate the removal of older woodstoves,
- 4) Targeted diesel reduction projects benefiting the Gorge:
 - a) Vehicles,
 - b) Trains,
 - c) Marine vessels, and,
 - d) Construction equipment
- 5) Alternative fuels, biodiesel, electric, etc., and
- 6) Other regional emission sources such as fertilizer use, forestry burning, long-range regional transport.

We encourage the Gorge Commission, USDA Forest Service, US EPA, tribes, interest groups and public to provide other possible projects for consideration as we move together collaboratively.

NPCC will explore the formation of the bi-state group, suggest a workable framework for the group, and address questions such as, how the effort would be convened, the scope and mission of the group, who would sit on the collaborative team, funding, and the role of the Gorge Commission as well as the tribes, public, stakeholders, and state and federal agencies. NPCC will complete its tasks by summer 2007. This collaborative approach is supported by Governor Kulongoski's staff and has conceptual support from Governor Gregoire's staff.

Additionally, DEQ's 2007 budget request to the Oregon legislature will include funding to restore staff in order to support a Gorge Solutions effort, which would be effective July 1, 2007. WDOE's next budget request to the Washington legislature will include funding to restore their federally-required visibility program (which does not necessarily mean a return of Ecology to the Gorge), and the earliest funding would be available for Gorge work is July 1, 2008. This creates a one year gap. It is very important that WDOE return as part of any bi-state effort for it to be successful. SWCAA cannot carry the Washington side of the effort alone and all the air agencies need additional funding to support this proposed effort. As a result, we do not currently know whether a bi-state collaborative group can begin in the fall of 2007 with each air agency involved. The air agencies will report to the Gorge Commission on NPCC's scoping progress between now and August 2007, which will include updates on the status of the governors' stances on the convening and timing of a bi-state group.

IV. A Guiding Benchmark for the Future

At the conclusion of the study in 2007, the agencies may recommend that we begin focusing immediately on collaboratively developing and implementing actual emission reduction projects to further improve visibility in the Scenic Area, rather than postpone that work while another long and potentially contentious process is implemented to articulate a permanent numeric air quality goal for the Gorge. In order to guide this work, the Air Agencies may propose “*improvement*” as the guiding benchmark for the near future. This would help protect and enhance the Scenic area *now* by ensuring that local and regional growth does not degrade Gorge visibility and help incremental and ongoing visibility improvement projects get off the ground. This would include ongoing monitoring, tracking, modeling, and collaborative actions to ensure continued progress toward meeting the resource and economic purposes of the Scenic Act.

In the summer of 2007, we will have the final study results, a better idea of the monetary and FTE resources available to the agencies, more information on the possible return of Washington’s Department of Ecology, and a clearer focus on the potential for a collaborative bi-state effort to guide our work. At that point, we can explore the progress made, acceptable milestones, and Gorge Commission concurrence options.

V. Additional Topics Raised by the Gorge Commission

These issues are listed below with responses reflecting the air agencies’ current perspective.

A. What authority and tools does the Gorge Commission and relevant agencies involved have over one another?

The “legal” answer to this question is beyond the scope of this memo and the air agency’s expertise. The initial project work plan described basic roles and responsibilities as follows:

- 1) Role of the Gorge Commission:** As the regional policy-making body for the Columbia River Gorge National Scenic Area, it is the responsibility of the Columbia River Gorge Commission to decide if the recommended strategy meets the purposes of the National Scenic Area Act.
- 2) Role of the Air Agencies:** The Commission recognizes that the air agencies are the experts in air quality and the development of strategies. The air agencies’ role is to: (1) continue to monitor air pollution and visibility levels in the Gorge, and (2) conduct an analysis of monitoring and emissions data to identify all sources, both inside and outside the Scenic Area that significantly contribute to air pollution. Based on this analysis, they will develop and implement a regional air quality strategy to carry out the purposes of the Scenic Area Act, in consultation with affected stakeholders.
- 3) Role of the Forest Service and Environmental Protection Agency:** The U.S. Forest Service and the U.S. EPA are partners in funding and conducting necessary research, evaluating results, as well as evaluating and implementing strategy options. The Agencies acknowledge and support the Forest Service’s statement that “The Forest Service and Agencies will commit to coordination of technical study efforts and sharing of data as necessary to further our knowledge and understanding of air quality issues within the

National Scenic Area.” Additionally, consultation with the Tribes is the primary role of the U.S. Forest Service and U.S. EPA.

B. How will the Commission decide whether the results of the technical study and any proposed follow-up action meets the purposes and standards of the Act?

The Commission can concur if the proposed strategy satisfies the Scenic Area Act and Management Plan language. Stakeholders, tribes, and citizens will have wide ranging and strong opinions about how much and how quickly air quality/visibility should improve. In the summer of 2007, we will have the final study results, a better idea of resources available to the agencies, more information regarding Washington’s DOE status, and a clearer focus on the potential for a collaborative Gorge Solutions-type group. At that point, we can explore options for Gorge Commission concurrence. If the Commission concurs with the proposed strategy, the strategy will be taken forward by the agencies for implementation. If the Commission finds the proposed strategy does not meet the Act’s purposes (fails to concur), they will send it back to the agencies for further work. In that event, the agencies will request that the Commission provide a clear explanation of where they believe the strategy is deficient.

C. How will the technical work and modeling results be released and discussed with public?

In August 2005, the Lead Agencies stated that due to drastic budget cuts, the anticipated policy and public outreach work would be dramatically reduced, that DEQ and SWCAA could not convene the 32 member Bi-State Advisory Committee as envisioned in the project Work Plan, and that a strategy recommendation would have to wait until we reached the end of the study. Given this budget situation, the state air agencies are implementing a streamlined public involvement process summarized in Section VII, below.

D. How will public feedback be incorporated into decisions?

The agencies will continue to solicit public feedback at important junctures in the project and will consider comments when developing recommendations to the Commission. Any future bi-state group, as well as any government-sponsored group, would be open to public participation.

E. How will the tribal governments be involved in decisions about the “Assessment and Plan?”

The Agencies acknowledge and support the Forest Service’s statement that, “Tribal consultation responsibilities will be accomplished through coordination between EPA and the Forest Service (CRGNSA).” We have been and continue to be willing to participate in any formal tribal consultation process the federal government sponsors because the agencies welcome any input from each of the tribes. If a federally-sponsored consultation process is not in process by the end of 2006, we will independently invite the tribes to consult informally with us, not as a substitute for formal consultation, but as a way to request their input before our 2007 Gorge Commission presentation. The tribes may also wish to participate in any bi-state group, as well as any government-sponsored group.

F. Should the Commission and/or USDA Forest Service have a more active role in designing a process to develop a Gorge air quality strategy?

The answer to this question is premature until the Study results are in, until we know whether or not the agencies’ budgets for this work have been restored, and until the results of the NPCC work are

available for review and discussion. Hopefully, the Commission and Forest Service will play an active role on any bi-state group or government-sponsored group.

G. What role should the original working group (“Project Coordination Team”) that helped develop the Gorge Air Quality Work Plan have in a new strategy development process?

The original Work Plan steering committee completed its task in 2001 and is disbanded. Members of the original committee can (as can any stakeholder) offer comment on the study results or agency’s recommendations and could potentially participate in any bi-state or any government sponsored process to identify and develop collaboratively developed emission reduction projects.

VI Public Involvement

The agencies will present our science reports, along with our initial recommendations, at a public meeting and will take public comment. We will consider those comments, and we will (per the management plan directive) participate in an EPA or USFS sponsored consultation with each of the tribes. We will also consult other stakeholders as we formulate our recommendation to the Commission later in 2007. Details of the specific public involvement plan to support the above are under development and the budget is restricted.

Major themes heard from stakeholders and preliminary responses include:

- a) **“Geographic Fairness.”** The Technical Study and Gorge Strategy are evaluating emission sources from both inside and outside the Gorge. The above recommended strategy will make geographic fairness a top priority.
- b) **Potential impact on local economies.** The conversations surrounding this topic would be enhanced by a bi-state collaborative group, which would create a forum to discuss economic impacts of any new collaboratively developed emission reduction projects.
- c) **Acid deposition and the potential risk to ecosystems and Native American rock images.** The expected reduction in visibility impairing pollutants will also likely reduce acid deposition in the Gorge, and thus reduce the risk to ecosystems and Native American rock images. The Agencies acknowledge and support the Forest Service’s statement that “The Forest Service and Agencies will commit to coordination of technical study efforts and sharing of data as necessary to further our knowledge and understanding of air quality issues within the National Scenic Area.” We have not yet seen data from the Forest Service’s latest research effort on acidic deposition in soils, which is a follow-up effort to the USFS’s previous “fog water” study. As a result, we are not in a position to comment on it. Neither of these Forest Service studies are a formal part of our DEQ/SWCAA project, but they will be discussed in the final Gorge Science Summary Report, noted in Section II, F, above. The conversations surrounding this topic would be enhanced by the proposed bi-state collaborative group.
- d) **Scientific Certainty.** No scientific research is without uncertainty. The Gorge is a very complex area in terms of evaluating visibility impacts. Even with a \$1.8 million budget, the results of the research include inherent uncertainties. The final Science Report on Gorge Visibility will discuss scientific uncertainty. The lead air agencies and Gorge Commission will

inevitably need to make decisions regarding the Gorge based on the best scientific information they have available at the time.

- e) **What is the goal for air quality in the Gorge?** Section IV, above, describes “*A Guiding Benchmark for the Future.*”

VII. Next Steps Summary, Timeline, and Conclusion

September 2006 Gorge Commission meeting: As promised, we have reported on the final Monitoring Study, the selection of initial “what-if” scenarios, and the status of the modeling activities. As an extension of this meeting, the agencies are willing to meet with the tribes, local, state and federal government, partners, stakeholders, and the public to further explore the issues and options surrounding moving forward.

As to next steps, the following schedule details are based upon the assumption that model performance testing and other modeling issues come together in the next month or two:

December 2006: The agencies plan to release the draft modeling report on the agency web sites for initial public review and comment.

February 2007: The agencies plan to present the results of the modeling study to the Gorge Commission and hold a public meeting to present the work to the public for final comment.

April/May/June 2007: The agencies plan to release the draft integrated Gorge Science Summary report, combining results and comments from both the monitoring and modeling work. The agencies will seek public comment on the summary report. The final Science Summary Report will be presented at the August/September 2007 Gorge Commission meeting as part of the agency’s report and recommendations.

June/July/August 2007: Several weeks before the August/September 2007 Commission meeting, the agencies plan to release the final Gorge Science Summary report and their draft recommendation to the Commission for next steps in the Gorge strategy. The agencies will then host a public meeting to gather comments from the public, stakeholders, tribes and local governments regarding the study results and recommended plan for the future.

August/September 2007: At the August/September Commission meeting, the agencies will describe the comments received and make their recommendations. At this meeting, the agencies currently intend to seek concurrence from the Commission with its recommendations.