

**Testimony of  
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U.S. Environmental Protection Agency  
Before The  
Little Hoover Commission**

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Good morning and thank you for the opportunity to testify today. My name is Mike Burke; I am one of the Associate Directors of the Environmental Protection Agency's (EPA's) Chesapeake Bay Program Office. I am happy to be here today to discuss our experiences with large-scale ecosystem restoration.

I will confine my testimony to our experiences in the Chesapeake Bay basin, but I will frame my remarks around the "CALFED Governance Challenges Going Forward," published by the Little Hoover Commission on September 28, 2005. I will attempt to provide a frank assessment of the strengths of the Chesapeake Bay Program as well as the challenges we continue to face in the hopes that such an assessment will be of use to the Commission as you struggle with governance issues for the CALFED-Bay Delta Program.

Recognized by Congress as a national treasure, the Chesapeake Bay is the nation's largest estuary, with its watershed spanning 64,000 square-miles, including parts of six states and the District of Columbia. The Chesapeake Bay is also biologically diverse, providing habitat for more than 3,600 species of plants, fish, and shellfish. With the highest land-to-water ratio of any estuary in the world, the bay is particularly susceptible to activities that take place on surrounding lands. For example, urban sprawl significantly affects the bay's ecosystem. From 1950 to 2000, the population in the watershed nearly doubled, from just over 8 million to nearly 16 million. By 2020, the population in the bay's watershed is estimated to reach approximately 18 million.

Concerns about the Chesapeake Bay's overall health surfaced as early as the 1930s. Signs of deterioration in the bay's condition—declines in water clarity, oyster populations, and underwater grasses that provide habitat for shellfish—became even more apparent in the 1950s and 1960s. In the 1970s and early 1980s, the Environmental Protection Agency (EPA) found that excess nutrients from agricultural development, population growth, and discharges from sewage treatment plants were the primary causes for the decline in the bay's condition. Decades of poor fisheries management including extensive over-fishing of crabs, oysters and other species, compounded the problems. Responding to the public outcry about the degraded state of the Chesapeake Bay, the states of Maryland,

Pennsylvania, and Virginia; the District of Columbia; the Chesapeake Bay Commission—a tri-state legislative assembly representing Maryland, Pennsylvania, and Virginia; and EPA agreed in 1983 to protect and restore the Chesapeake Bay. Their agreement established the Chesapeake Executive Council and directed the Chesapeake Bay Program to conduct the restoration of the bay. The Bay Program currently includes partners at the federal, state, and local levels, as well as academic institutions and nonprofit organizations. EPA's Chesapeake Bay Program Office provides support to the Chesapeake Executive Council and, among other things, is responsible for developing and providing information on the environmental quality and living resources of the Chesapeake Bay ecosystem. In addition, the Chesapeake Bay Program Office is responsible for coordinating EPA's activities with other federal agencies and state and local authorities participating in the restoration effort.

Subsequent agreements in 1987, 1992, and 2000 reaffirmed the partners' commitment to bay restoration. The most recent, *Chesapeake 2000*, envisions a Chesapeake Bay watershed that includes abundant, diverse populations of living resources and healthy, clean streams and rivers that can sustain strong local and regional economies. In *Chesapeake 2000*, the partners pledged 102 commitments—both management actions, such as stemming point source pollution, as well as actions that directly affect the health of the bay. These commitments are organized under the following five broad goals:

- **Protecting and restoring living resources**
- **Protecting and restoring vital habitats**
- **Protecting and restoring water quality**
- **Sound land use**
- **Stewardship and community engagement**

The broad program goals and the number of specific commitments are important hallmarks of the Chesapeake Bay Program, and I will come back to *Chesapeake 2000* later in my testimony.

In "CALFED Governance Challenges Going Forward," your staff has summarized four key attributes of a governance system: Transparency, Accountability, Efficiency, and Effectiveness. Let me comment on each of them as they relate to the Chesapeake Bay Program.

**Transparency**: With one notable exception, all Chesapeake Bay Program meetings are open to the public; agendas are published in advance, and all background materials are posted on the internet, typically two weeks prior to any meeting date. The annual meeting of the governing Executive Council is held at

a widely accessible public venue. This year, for example, the meeting will be held at the National Geographic Society's building in Washington, D.C. Other recent sessions have been held at Mount Vernon and the Baltimore Aquarium. These meetings, featuring the elected leaders of the Bay jurisdictions and the EPA Administrator, typically attract about 200 people.

The Principals' Staff Committee is composed largely of the cabinet level secretaries of the jurisdictions along with the EPA mid-Atlantic regional administrator. These meetings occur typically three or four times a year and are open to the public. The Implementation Committee is composed of senior managers from each of the jurisdictions as well as the chairs of the Program's numerous committees and subcommittees. These meetings are held monthly, with half of the sessions held at the Bay Program's home office in Annapolis and the other half conducted as teleconferences. As with the Principals' Staff Committee meetings, these sessions are open to the public. Candidly, however, few people from outside the Program except some of the larger environmental organizations regularly attend these sessions.

The numerous committee, subcommittee, and workgroup meetings are also scheduled in advance; meeting materials are posted to the website, and the sessions are open to the public.

The states have developed tributary-specific cleanup plans, often with extensive stakeholder involvement. In Maryland, for example, well-advertised evening meetings were held in local communities, and citizens had a good opportunity for substantive input. Similarly, when the Program is faced with a special problem, workgroups are often formed that do extensive outreach to stakeholders. A current example involves developing a new strategy to deal with the excess farm animal manure and chicken litter that is a significant source of the excess nitrogen and phosphorus that pollutes the Chesapeake Bay. The workgroup has included NGOs, farmers, feed store owners, agricultural research assistance experts, a representative from the poultry growers trade association and the like. The Program's subcommittees and workgroups have an open door policy – anyone who wants to participate is welcome to do so. Typically the Program needs to solicit participation from non-partners, but organizations and individuals can and do self-nominate.

In short, virtually everything the Bay Program does is visible to the public. The one exception that I noted earlier is at the annual Executive Council meeting. It has been customary during the 20+ year history of the Program for the Executive Council to meet privately for a portion of its annual meeting. During this private session, the Executive Council hears reports from its three advisory committees: the Citizens Advisory Committee, the Local Government Advisory Committee, and the Scientific and Technical Advisory Committee. The Executive Council can also take this time to resolve any final issues before continuing the remainder of its meeting in public session.

William Matuszeski, former Director of the Chesapeake Bay Program, has argued that the private meetings of the Executive Council have been important assets for the program. They provide Program leadership with an opportunity to discuss critical issues in a candid fashion. According to Matuszeski, these sessions have allowed members to iron out final details on pending Directives, frequently resulting in setting more aggressive goals than had been reached at the Principals' Staff Committee level. Private meetings, he goes on, mean that the work done by the Executive Council is more than merely ceremonial. Members must be prepared to listen to their colleagues and engage substantively in discussions.

[The Chesapeake Bay Program is not subject to the Federal Advisory Committee Act. Although supported by the federal government's EPA Bay Program Office, the Chesapeake Bay Program is not a creature of the federal government. Because the Program does not set federal policy or establish federal regulations, government lawyers have determined that FACA does not apply.]

**Accountability:** As your staff notes, accountability can be an elusive quality. As a partnership program, the vast majority of goals are to be achieved by collective action. For example, the Program has a goal of removing another 1,000 miles of stream and river blockages to migrating fish. The states do not have assigned goals. Instead, the broad partnership agrees to meet the collective goal. The Program up-dates its progress toward meeting this goal annually on its website and in various publications, so the public can fully judge the effectiveness of the Program in meeting this numeric goal. But no one partner is responsible, and that diffuse responsibility can sometimes be a problem.

Nevertheless, accountability is a hallmark of the Chesapeake Bay Program on a number of counts. We have pioneered – since the 1987 Agreement – the setting of numeric environmental goals complete with timetables for implementation. As I noted earlier, the Program has more than 100 specific commitments in a wide range of areas. The Bay Program's website is home to scores of "Environmental Indicators" that measure the progress of the restoration effort and the health of the ecosystem.

**Efficiency:** Some of the same efficiency issues that you identify with CALFED face the Chesapeake Bay Program daily. A broad partnership effort necessarily requires extensive opportunities to air issues, collect data, argue points of view, and eventually reach decisions. Even routine matters can take some time to be resolved because of the collaborative nature of the Program.

While this process-heavy approach can cause exasperating delays in some instances, in others it actually improves efficiency. Let me cite one recent and very important example.

Wastewater treatment facilities account for 20% of the excess nutrients flowing into the Chesapeake Bay. We all recognized that we needed to limit these pollutants, but we lacked consistent and enforceable water quality standards to do so. Following the direction outlined in *Chesapeake 2000*, we embarked upon an effort to describe the water quality needs of the living resources of the Bay and then to develop common water quality criteria for the Bay and its tidal tributaries, regardless of political jurisdiction. We convened an intense series of meetings over a two-year period. Based on the excellent estuarine science developed by the Program and its partners over the past twenty years, we were able to come to consensus in defining the water quality needs of the living resources. Critically, the politically-appointed Principals' Staff Committee members then agreed to a tributary-by-tributary allocation of pollutant loads. Scientists, citizens, sewage treatment authorities, regulators and the region's political leadership were able to reach these agreements because the Program had a demonstrated record of relying on sound science and developing its recommendations in a fair and impartial fashion. Each of the four jurisdictions (Delaware, the District of Columbia, Maryland and Virginia) with Bay or tidal waters adopted this common set of water quality criteria. Building upon that effort, EPA and the regulatory authorities from all seven jurisdictions from as far away as New York and West Virginia have adopted a common permitting approach for wastewater treatment facilities. Today more than 400 such facilities throughout the entire watershed are now seeing nutrient limits written into their NPDES permits. This will result in a more than 20 million pound annual reduction in nitrogen loads to the Bay, based on a 2003 baseline.

This process took years to complete. But a traditional process, undertaken unilaterally by EPA and then adopted by the individual states, would have taken much longer. A former director of the national water programs for EPA estimates that "business as usual" would have required 8-10 years to complete the same process. She also notes that having such broad agreement means that states that are far up-stream from the degraded waters of the Chesapeake are fully cooperating in this effort. In similar circumstances around the country, up-watershed states have balked at stiffening permits for these far-field effects, and lawsuits have been the order of the day.

This process-heavy method was "the Bay way" and was too slow for those who wanted enforceable permit limits sooner rather than later. But in the end, the reliance on this collaborative approach has resulted in an excellent result and in less time than more traditional approaches might have yielded. Furthermore, it appears to have forestalled litigation.

**Effectiveness:** Ultimately, a Program needs to be judged on its effectiveness. So, how has the Chesapeake Bay Program fared? I wish I could sit here and tout a resounding success, but I can't. Certainly the living resources of the Chesapeake Bay are in better shape than if there had been no Chesapeake Bay Program, but the sad truth is that the ecosystem is still degraded. This past summer we had the worst case of anoxia in the deep waters of the Bay that we have ever seen.

Like CALFED, the Chesapeake Bay restoration effort has identified management actions that far exceed the financial resources currently utilized by the partners in the restoration effort. Restoring the bay – either the Chesapeake or the San Francisco – is an expensive proposition. But as former Virginia governor Gerald Baliles said last year, it is a job that only grows more difficult and more expensive as development pressure and population growth further sap the resiliency of the ecosystem.

The news is not all bad, of course. Today the vital underwater grasses that provide water quality benefits as well as essential habitat to the Bay's living resources cover about twice as large an area as they did when the Program began in 1983. Similarly, the population of striped bass that crashed has now been officially "restored."

As I noted in the beginning of my testimony, we are working in five broad goal areas. Within each area we have established specific commitments. The most important are the ones that set the environmental end points we seek. We are committed to increasing the oyster stock by tenfold and the extent of underwater Bay grasses to 185,000 acres. We are committed to specific measures of water quality, including dissolved oxygen levels that vary over time and space to match the needs of the species that live and breed in the Chesapeake Bay and its tidal waters.

Similarly, we have committed to a number of specific management actions that we need to take to restore the living resource abundance of the Bay. We have time-specific, measurable goals for open space preservation, increases in wetlands and riparian forests, and agricultural best management practices such as the use of nutrient management plans on croplands.

All of these commitments and the specific measures of our progress are compiled by the Bay Program and presented to the public for its evaluation. Every measure is posted on our website, and illustrative environmental indicators are published regularly. Political leaders, the press and the public can make their own judgments about the effectiveness of the partnership's efforts because all of our measures are available for all to see.

We think that we can and must put an even sharper edge on this long-standing effort. Our environmental indicators are robust, but their proliferation

can sometimes confuse as much as enlighten. We believe we need to develop scientifically defensible composite measures of Bay ecosystem health so that we can provide a clear, summarized picture of Bay health. Similarly, we need to do a better job of separating indicators that measure the progress of our management actions from those that more directly measure the health of the resource. And finally, we need to do a better job of defining what we can accomplish with existing financial and institutional resources without losing sight of what it will take to reach the environmental end-points that form the heart of our mission.

**Conclusion:**

Large-scale ecosystem restoration can be a daunting task. But our experience with the Chesapeake Bay watershed leads us to believe that such a comprehensive approach is essential and that it can be successful.

I am happy to answer any of your questions, and I thank you again for the opportunity to testify this morning.

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