



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Washington, D.C. 20240

IN REPLY REFER TO:

February 3, 2006

## MEMORANDUM

To: FWS Directorate

From: Director *A. Dale Hall*

Subject: Maintaining Integrity in Our Scientific Decision-Making Process

The question of "sound science" is omnipresent in all we do. It is our responsibility to bring clarity to the science we use and require honest evaluations of its strength. Science begins as data collected and they represent only a starting point. Even in peer reviewed scientific publications, there exists the possibility that the data represent only the beginning phase of scientific understanding. Science progresses along three steps in its evolution: basic data that evolve into information, and information that evolves into knowledge. In work we undertake, we may well find ourselves at any one of these steps as we sort out "best available science and information". Our draft documents must always present all legitimate information we have, but there must also be an honest evaluation of the strength of the information. In my experience, we normally consider the information at hand as one of three value bases: 1) we don't know what the information indicates; 2) we think we know, but aren't sure, or; 3) we are very confident we have achieved a level of "knowledge" based on the information. It is imperative that we address two evaluations to ensure the quality of our information. First, the strength of the science (data, information or knowledge) and, second, the confidence we propose to place on the science (don't know, might know, know). If we are to have sound policy discussions on the application of science, we simply must have these assessments. I will ask our Service Science Team to prepare recommendations relative to implementing these assessments.

Premature release of drafts, scientific information or briefings can significantly undermine the confidence in the process by the public (through the Administrative Record) as well as our ability to have free and open debate on data interpretation. Failure to maintain a culture of "in Service scientific debate" prior to forming conclusions can significantly undermine the credibility placed with the science as we and the Department engage in policy or decision-making discussions. In order to ensure the integrity of this process, it is imperative that all documents, assessments and drafts remain inside the Service, except for discussions as appropriate with your recognized federal and state peers. Any requests for such release or premature briefings should be forwarded to this office for appropriate action.

We need to be constantly vigilant that we are providing the foundation for finding solutions, not necessarily the solutions themselves. Through the interpretation and application of science we provide the beginning point for policy level discussions on many contentious and difficult issues.

Finally, it is critical that all draft documents reach Headquarters on schedule to allow time for adequate review and policy level discussions. It reduces our ability to effectively formulate policy decisions when we do not have timely information.

I greatly appreciate all your continuing efforts to provide the best available information for decision-making. I believe this guidance and the philosophy behind it will enhance our ability to maintain our high standard of excellence.