



# NOAA FISHERIES

## Northwest Fisheries Science Center

## G. Communication

The Population Ecology Program (PEP, NWFSC-FRAM Division) and the Groundfish Analysis Team (GAT, SWFSC-FE Division) communicate extensively with each other and with others in both Science Centers who are engaged in groundfish-related data-collection and research. PEP assessment staff routinely meet 2-3 times per month to discuss team priorities, monitor progress, and engage in technical discussions to improve and standardize assessment practices. PEP and GAT leadership also routinely discuss assessment-related planning and prioritization issues, particularly prior to Council meetings. Assessments and research conducted by NMFS assessment staff rely on data collected by others, and communication with these data-collection teams is very important for ensuring that available data are relevant, accurate, and interpreted correctly. PEP has conducted regular discussions with other FRAM programs engaged in groundfish data collection over the past decade, in order to ensure that data collections support assessments and high-priority research. NMFS assessment scientists actively engage members of state agencies, the Pacific Fishery Management Council (PFMC) and its appropriate advisory bodies, stakeholders, academia, and other interested parties regarding sample/data collection, interpretation of data, fishery research, and assessment findings.

The most common and productive avenues of communication are:

1. Meetings within and between the two NMFS assessment groups
2. Meetings between PEP/GAT staff and other Science Center staff engaged in groundfish data collection and research
3. Meetings/discussions arising through processes of the PFMC and the International Pacific Hake Agreement
4. Pre-assessment meetings with stakeholders and the public
5. Interactions with state fishery management agencies
6. Collaboration with academic partners
7. Formal (non-Council) and informal opportunities for dialogue with stakeholders
8. NOAA and NMFS working groups
9. Public portals such as SIS and FSSI
10. Local, regional, and international seminars and meetings
11. Documents and reports

Engagement by assessment staff through these diverse avenues of communication has resulted in many improvements to the data available for use in Pacific coast groundfish assessments. For example, the collection of catch and biological information from FRAM surveys, state biologists, and observer programs has been prioritized through communication between assessment, survey, state, and observer scientists, allowing all programs to anticipate the data needs to improve stock assessments. In addition to aiding in these general ongoing improvements in data collection, assessment staff were influential in the decision for and design of an emergency survey for Pacific hake which was implemented jointly between the NWFSC and SWFSC in 2012 after the concerns of managers, stakeholders, and assessment scientists were communicated to survey scientists and NMFS headquarters. The fishing industry is often involved with fisheries-independent data collection, which allows for fishery scientists and the fishing industry to learn from each other as well as engage in informal discussions about data and assessments.

Improvements to data have enhanced the ability of the PEP/GAT to produce stock assessments and provide stock status and management advice for the 90+ species managed under fishery management plans on the Pacific coast. Communicating assessment methods and results to fisheries managers, the scientific community, stakeholders, and the public is an important task that the assessment teams take seriously. The two teams communicate often to ensure that the best possible assessment methods and data are being used in a consistent manner. Many meetings are held to review assessments as well as involve stakeholders and allow for public comment. In particular, a pre-

assessment meeting typically occurs early in the assessment process to inform as well as learn from stakeholders. Before an assessment is finalized, results are presented to the PFMC advisory bodies, including the Groundfish Advisory subpanel, made up of industry and non-governmental organization representatives, the Scientific & Statistical Committee, and the Groundfish Management Team; the latter two include many state and federal representatives among their membership. Assessment documents explain the data, model specification, assessment results, management outcomes, and priority research. By following a consistent terms of reference and outline, these documents are easily comparable, meaning that once an individual is comfortable in understanding one assessment, it is easier for that person to interpret other assessment documents. These documents are available to the public and are archived on the PFMC website, while the Species Information System (SIS) database, partially available to the public, stores assessment data and results.

Overall, the PEP and GAT assessment teams maintain open avenues of communication with a wide variety of individuals and organizations to improve the data used in stock assessments and to communicate assessment results. There is an open line of communication with fishery managers and stakeholders, and advice is often incorporated into data collection programs and assessments. This advice and cooperation has resulted in the efficient collection of informative data and explanatory assessment documents which have proven quite usable by and helpful to managers and stakeholders.