

State of the IP 2008

November 19-20, 2008

Location: University of Oregon Building,
70 NW Couch Street, Portland, OR.



NOAA



PNAMP

The Pacific Northwest Aquatic Monitoring Partnership (PNAMP) and NOAA Fisheries hosted a workshop to improve the state of the knowledge on and consistency for Intrinsic Potential (IP) analyses used in the Pacific Northwest and California for salmon and resident salmonids. Intrinsic Potential-type analyses are spatial analyses that use intrinsic physical stream habitat variables to rate the habitat potential of stream reaches for aquatic species. Typically, IP models use a set of index curves or biological envelopes to relate each variable to fish preference, then combine indices to estimate an intrinsic reach score.

DAY 1

Day 1 of the workshop focused on habitat variables, spatial datasets and GIS methods related to IP analyses. The day began with presentations providing general information about IP, including methods used, background, considerations and data requirements.

Presentations ([Workshop Day 1 Presentation Notes](#)):

- [State of the IP 2008 - presentation by Mindi Sheer](#) (NOAA – Northwest Fisheries Science Center)
- [Modeling Intrinsic Potential for Steelhead and Coho Salmon - presentation by Kelly Burnett](#) (USFS-Pacific Northwest Research Station)
- [Development and implementation of IP models, and their integration with watershed and land-use attributes - presentation of Netmap from Lee Benda](#) (EarthSystems Institute)

Following the presentations, participants split into two groups to discuss applications of IP models. In this session, the groups discussed caveats to consider when using IP scores, collected information about ongoing projects from participants, and weighed in on appropriate application for this type of analysis. One group focused more on the technical aspects, while the other focused more on the management perspective.

Workshop background doc: [IP Workshop - Applying Intrinsic Potential Models Strawman](#)

Workshop draft notes doc: [Workshop IP Applications](#)

In the afternoon of Day 1, workshop participants again split into two different sessions. One discussed IP variables and landscape considerations, focusing on methods of calculating IP scores, estimating physical stream variables, and caveats with variables and regional considerations. The second group focused on hydrography, which is the building block of IP. Specifically, the group discussed technical hydrographic considerations independent of source, reviewed source hydrographic data used in IP, and collected feedback on issues that can affect the interpretation of IP scores.

Workshop background docs: [IP Workshop - Trouble-shooting IP variables Strawman](#);
[IP Workshop - Hydrography, the building block of IP Strawman](#)

Workshop draft notes docs: [Workshop IP Variables](#); [Workshop IP Hydrography](#)

DAY 2

Day 2 was devoted to the biological considerations of IP analyses. The day started with presentations that gave examples of IP-based analyses and information on habitat to consider when developing IP models.

Presentations:

- [Application of IP Models for Salmon and Steelhead Recovery Planning in California - presentation by Brian Spence \(NOAA – Southwest Fisheries Science Center\)](#)
- [The habitat perspective: what are we missing with intrinsic potential? - presentation by Tim Beechie \(NOAA – Northwest Fisheries Science Center\)](#)
- [Using Intrinsic Potential for Salmon Conservation Planning Across the Pacific Rim - presentation by Tom Miewald \(Wild Salmon Center\)](#)

A follow-up discussion covered management and recovery-based uses of IP models, steps needed to develop or improve existing IP curves, and possibilities for validating model results with field data on fish use.

Workshop notes: ([Workshop Day 2 Presentation and Discussion Notes](#))

The afternoon session of Day 2 emphasized species-specific biology. A short presentation outlined the session's goals ([link to presentation](#)): to assess if there was agreement among experts on appropriate IP curves for each species and if not, develop a working plan to finalize species-specific curves. Workshop participants broke into three groups, and addressed the biology behind chinook, coho, and steelhead habitat preference by life stage, with respect to existing IP habitat curves. In addition, groups also touched on appropriate uses of the models, e.g., identify where a model may “underperform” and provide some guidelines for how to remedy this.

Workshop background docs: [IP Workshop Chinook Strawman](#); [IP Workshop Coho Strawman](#); [IP Workshop Steelhead Strawman](#)

Workshop draft notes docs: [Workshop IP Chinook group](#); [Workshop IP Coho group](#); [Workshop IP Steelhead group](#)

The next steps for the workshop planning group are to prepare a guidance document based on the workshop background strawman work (including IP templates and references collected through the data call prior to the workshop), participant discussions, and notes from this workshop. Look for this document in late January 2009. The planning group will also present any further work, project proposals, or summary ideas for continued progress at this point.

For more information on this workshop, or questions on products, next steps, references, or how this relates to other habitat potential work, please contact: Jennifer Bayer (PNAMP); jbayer@usgs.gov.

All workshop documents and references will be maintained at <http://www.pnamp.org/web/calendar/PNAMPDayPage.cfm?compdate=11/19/2008>.

PNAMP/NOAA Intrinsic Potential Workshop - State of the IP 2008
November 19 - 20, 2008

List of Attendees

[\(link to list with group details\)](#)

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