

Chinook Stocking Strategy: 2023 Public Input Survey Results and Management Decision

Division of Fish & Wildlife

3/27/2023

Management Background:

Indiana DNR annually stocks Chinook salmon (along with brown trout, steelhead trout, and coho salmon) in Lake Michigan and its tributaries to maintain the economically and culturally important population of salmon to fish. The biology of Chinook salmon is such that they imprint to their stocking site in Lake Michigan tributaries or harbors, then swim throughout Lake Michigan feeding until they are sexually mature, at which point they return to their original stocking location in the fall to spawn. The goal of Indiana DNR’s Chinook stocking is to create a fall fishery as the fish return to stocking sites as mature adults to undergo their spawning runs.

2023 Public Input Survey Process

The goal of the public input process was to use results from a public survey in conjunction with the best available data on angler effort (hours of fishing) and success (catch rate), and Chinook survival and return to the fishery to select a specific stocking strategy.

The public input process as part of a broader management decision aligns with several aspects of the DNR Division of Fish and Wildlife (DFW) strategic plan, which calls for the agency to value biological, ecological, and social sciences in advancing conservation while engaging citizens. Specifically, the plan calls for DFW to engage in proactive dialogue to foster trust and transparency, solicit and incorporate public comments into decision making processes, and understand the public’s desire and expectations. As a small fisheries agency with limited resources, using an electronically delivered survey to solicit public input was deemed the best option for cost-effectively involving public input directly in fisheries management.

The DNR held two public meetings, one in Michigan City, and one in East Chicago, to inform the public about the upcoming public survey, explain factors the DNR considers when stocking fish, present data on the Chinook fishery, and outline the three management options DNR was considering. Following the meetings, a 4th option proposed by a meeting attendee (Option D), which was deemed an excellent option both from a public input and management perspective was added to the survey. See Table 1 for management options presented in the survey.

Chinook stocking strategy with number of salmon per site	East Chicago	Little Calumet River	Trail Creek	Total Number
Old Strategy	75,000	75,000	75,000	225,000
Option A	91,677	91,677	91,677	275,000
Option B	0	137,500	137,500	275,000
Option C	75,000	125,000	75,000	275,000
Option D	75,000	100,000	100,000	275,000

Table 1. Management options presented in the public input survey, and the number of Chinook salmon that would be stocked at each stocking site under each option.

Following the meetings, the public survey was emailed to all anglers with a valid email address in DNR’s license system with a lifetime license, or that had purchased a trout and salmon stamp, one day license, senior license, or senior fish for life license in the past three years – totaling nearly 150,000 individuals. An open link was also created for anglers with a valid fishing license without an email in the license system. The survey asked what factors anglers value when considering where to fish for Chinook salmon in the fall, how acceptable they found potential stocking strategies, and asked them to select a single stocking strategy they preferred.

Survey Results

The survey was completed by 3,104 individuals, of which 1,970 were Lake Michigan salmon anglers. Like DNR creel survey data, survey participants’ preferred mode of fishing was diverse: 1,110 said they used a boat to fish for salmon, 985 from shore, 1,127 from the tributaries (many anglers reported multiple modes of fishing).

Of survey participants that gave their single preferred management option, 25% preferred Option A, 38% preferred Option B, 8% Option C, and 29% preferred Option D. Although 38% of anglers preferred Option B, which eliminated East Chicago as a stocking site, all other options retained East Chicago, which means a majority (62%) of anglers preferred an option that kept stocking all three sites.

Approximately 65% of anglers found Options A, B, and D acceptable, with only 44% of anglers rating Option C as acceptable (Figure 1). Option D had the fewest anglers (14.5%) rating it as unacceptable and the most anglers (65.3) rating it as acceptable, giving this option the best net favorability (percent acceptable minus percent unacceptable).

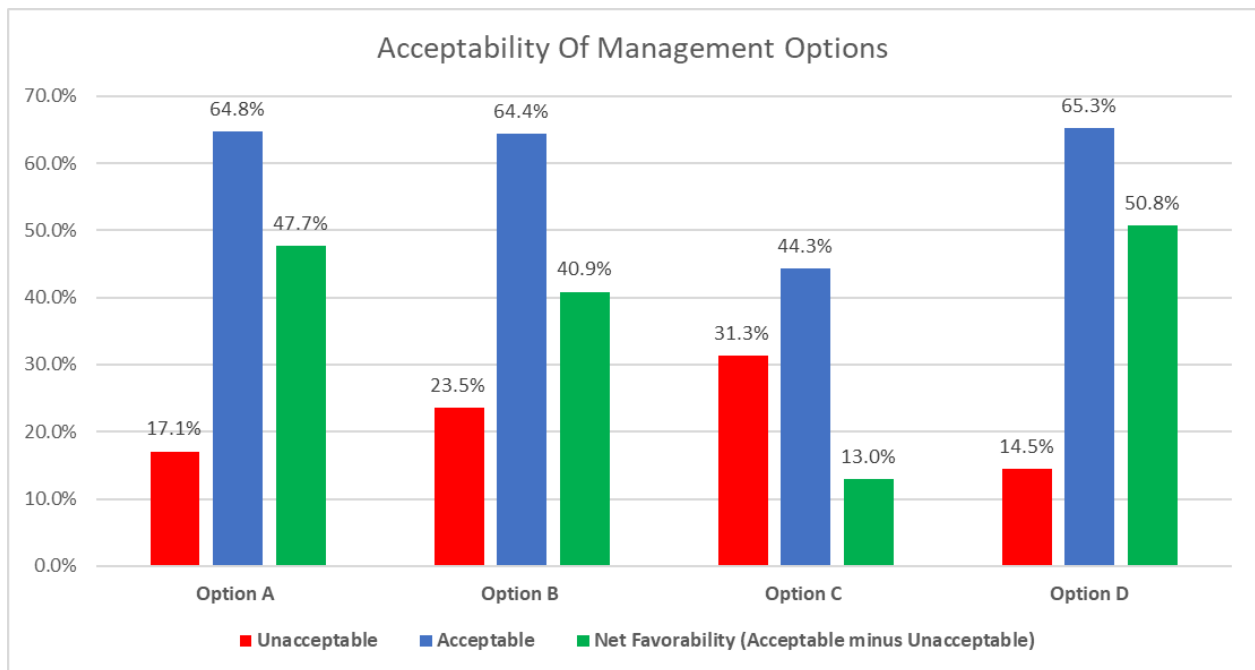


Figure 1. Acceptability, unacceptability, and net favorability (acceptable minus unacceptable) of each stocking option presented in the public input survey.

Management Decision

Starting in spring of 2023 the DNR will implement Option D, which was the option suggested at the public meetings and subsequently added to the public survey. This option had the highest net favorability rating and was the 2nd-most preferred stocking option. This option will stock 75,000 Chinook salmon at East Chicago, 100,000 in the Little Calumet River, and 100,000 in Trail Creek.

In addition to having broad public support, this option will best balance all factors the DNR considers when stocking, such as maximizing survival and return, fishing opportunities, and stocking locations.