#### MEMORANDUM FOR RECORD

**SUBJECT:** Proposal to allow for the harvest of sunfish less than 7 inches in length for bait for noncommercial personal use.

- 1. Problem. Sunfish are one of the primary forage fish for game fish like northern pike, muskies, walleye, bass, channel catfish and flathead catfish. Sunfish are particularly prone to stunting. Lakes that have good spawning habitat but not much food can produce swarms of small adult sunnies that never grow larger than four or five inches. The cause of this "stunting", as it's often called, is not truly known. The problem isn't discovering why bluegills are often stunted but what is the best mechanism to control their numbers so stunting also can be managed. The obvious solution to the stunting issue is to remove small bluegill; but this sounds easier than it is. The Catfish Work Group believes that we could add another dimension to the control of stunted sunfish populations by making small sunfish (7 inches and under) legal to harvest as bait. By designating sunfish less than 7 inches in length as minnows makes them eligible for bait harvest. This may not totally solve the stunting issue but it would help and it would provide a quality bait for anglers to harvest and use in pursuit of game fish.
- **2. Recommendation.** That legislative action is taken to amend Minnesota Statute 97A.015 Definitions: Subd.29. Minnows. to include language in the statute that designates sunfish less than 7 inches in length as minnows. An implementing document that addresses the language needed to affect this change is included at Annex A to this memorandum.

#### 3. Background.

This background information is taken directly off the Minnesota Department of Natural Resources website from their Sunfish program. It provides excellent information on sunfish biology and management and provided our Catfish Work Group critical information in the development of our bait harvest proposal.

Minnesota has several sunfish species, but the most popular with anglers are the bluegill and the pumpkinseed. Sunfish are particularly prone to stunting. Lakes that have good spawning habitat but not much food can produce swarms of small adult sunfish that never grow larger than four or five inches.

Bluegill are one of the largest, most popular and most widespread sunfish not only in Minnesota, but also in the nation. So, the bluegill has been studied more thoroughly and managed more intensively than other panfish. Because bluegill are terribly prolific, stocking is used only to introduce fish to a body of water or in highly used public fishing ponds. More often the problem is too many tiny bluegill and an absence of large sunfish, a condition particularly common in heavily fished lakes. The cause of this "stunting", as it's often called, is not truly known. It might be true stunting -- slow growth because of intense competition for food and an abundance of young fish. Or it may simply be a result of overfishing; that is, anglers simply remove most of the "keepers," leaving behind many small fish that further proliferate in the absence of larger sunfish.

The problem isn't discovering why bluegills are often stunted but what is the best mechanism to control their numbers so stunting also can be managed. For years fish managers believed that if a lake is filled with small panfish, the cause was intense competition for food. Without adequate prey, sunfish continue to reproduce but simply grow slower. Stunting might be caused by an abundance of excellent spawning in conjunction with poor growing conditions, such as a lack of forage. Moreover, thick weed growth -- escape cover -- allows sunfish to escape predators and thus survive in greater numbers.

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Another cause might be a lack of large game fish. Without a suitable predator to thin the ranks of small sunfish, the population remains too high for any individual fish to grow very fast. These may be the causes of stunting. But how do fish managers correct it?

One approach is to remove small bluegill; but this sounds easier than it is. During the 1940s and `50s, fish managers tried seining bluegill to reduce their numbers but couldn't remove enough fish to make a difference. In a later experiment, managers used a herbicide to destroy weeds -- "escape cover" -- to make the bluegill more venerable to predators. This, too, was judged a failure.

In a more successful attempt to reduce the number of bluegill and increase their size, the DNR treated a lake with a toxicant in such a way to kill most small bluegill while sparing the larger fish. The experiment worked, but chemical treatment was expensive, and one of the chemicals used in the treatments is no longer made.

Another approach is to try to increase the predation on small sunfish. Anglers and fish managers long thought that an abundance of big northern pike would keep bluegill in check. Such is not the case, however. Pike eat tremendous numbers of fish, but mostly suckers, minnows and perch. Whether because of the bluegill's spiny rayed dish shape or its ability to take cover in thick weeds, pike do not eat enough bluegill to reduce their numbers.

Largemouth bass appear to be a different story. They feed heavily on bluegill and seem adept at ambushing sunfish in heavy weeds. Largemouth will feed on bluegill up to one-quarter their own length. Consequently, a promising way of controlling bluegill numbers is by maintaining great numbers of medium-sized bass. The Catfish Work Group knows that channel catfish and flathead catfish love sunfish. Sunfish are a prized catfish bait in the states that allow their use as bait.

Many fish managers are beginning to believe that overfishing -- not stunting -- is the reason some lakes do not produce the big bluegill they once did. In such cases, growth rates are normal and food is plentiful, but anglers simply catch and remove all the good-sized fish, leaving behind the smaller bluegill, which multiply without the controlling influence of the large fish.

If this is true, the solution seems to be more straightforward: more big sunfish must be left in the lake if people are going to continue to enjoy catching them.

### 4. Facts.

You can legally possess and transport minnows taken from non-infested waters as long as they are in potable water. Suckers under 12 inches in length and bullheads under 7 inches in length are both considered minnows and as such they are legal to harvest, possess and to transport as bait. If we could get Minnesota Statute 97A.015 Definitions: Subd.29. Minnows. to include language in the statute that designates sunfish less than 7 inches in length as minnows we could legally harvest them for bait following the same regulatory requirements in place for suckers and bullheads.

**5. Conclusion.** The harvest of minnows for personal use as bait is an established practice. There are already adequate safeguards in place to allow the harvest of sucker and bullhead minnows for bait. The harvest of sunfish less than 7 inches in length for bait poses no significant increase in risk to preclude their being added to the list of minnows eligible for bait harvest. An Aquatic Invasive Species – Hazard Analysis and Critical Control Point Plan (AIS-HACCP) in support of this proposal is included as Annex B.

Respectfully submitted for consideration: The Catfish Work Group

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Annex A to: Proposal to allow for the harvest of sunfish less than 7 inches in length for bait for noncommercial personal use. Proposed legislative language change is indicated by bold, underlined text:

#### Minnesota Statute 97A.015 Definitions:

Subd. 25.Game fish. "Game fish" means walleye, sauger, yellow perch, channel catfish, flathead catfish; members of the pike family, Esocidae, including muskellunge and northern pike; members of the sunfish family, Centrarchidae, including largemouth bass, smallmouth bass, sunfish, rock bass, white crappie, black crappie, members of the temperate bass family, Percichthyidae, including white bass and yellow bass; members of the salmon and trout subfamily, Salmoninae, including Atlantic salmon, chinook salmon, coho salmon, pink salmon, kokanee salmon, lake trout, brook trout, brown trout, rainbow (steelhead) trout, and splake; members of the paddlefish family, Polyodontidae; members of the sturgeon family, Acipenseridae, including lake sturgeon, and shovelnose sturgeon. "Game fish" includes hybrids of game fish.

Subd. 29.Minnows. "Minnows" means: (1) members of the minnow family, Cyprinidae, except carp and goldfish; (2) members of the mudminnow family, Umbridae; (3) members of the sucker family, Catostomidae, not over 12 inches in length; (4) bullheads, ciscoes, lake whitefish, goldeyes, and mooneyes, not over seven inches long; (5) leeches; and (6) tadpole madtoms (willow cats) and stonecats; and sunfish, not over 7 inches in length.

Subd. 36.Possession. "Possession" means both actual and constructive possession and control of the things referred to.

Subd. 43.Rough fish. "Rough fish" means carp, buffalo, sucker, sheepshead, bowfin, burbot, cisco, gar, goldeye, and bullhead.

Subd. 46.Sunfish. "Sunfish" means bluegill, pumpkinseed, green sunfish, orange spotted sunfish, longear sunfish, and warmouth. "Sunfish" includes hybrids of sunfish.

Subd. 47.Taking. "Taking" means pursuing, shooting, killing, capturing, trapping, snaring, angling, spearing, or netting wild animals, or placing, setting, drawing, or using a net, trap, or other device to take wild animals. Taking includes attempting to take wild animals, and assisting another person in taking wild animals.

Subd. 54. Waters of this state; state waters. "Waters of this state" and "state waters" include all boundary and inland waters.

### **DRAFT 4**

Annex B to: Proposal to allow for the harvest of sunfish less than 7 inches in length for bait for noncommercial personal use.

# **Catfish Work Group**

### **AIS-HACCP**

Aquatic Invasive Species – Hazard Analysis and Critical Control Point Plan

In Support of

Proposal to allow for the harvest of sunfish less than 7 inches in length for bait for noncommercial personal use.