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FINDING OF NO SIGNIFICANT IMPACT

Guam Community Juvenile Rabbitfish Grow-out Project

Sustainable Fisheries Fund II
Western Pacific Regional Fishery Management Council

October 30, 2013

Introduction

This Finding of No Significant Impact (FONSI) was prepared according to the guidelines established in National Marine Fisheries Service (NMFS) Instruction 30-124-1 (July 22, 2005) and the requirements set forth in National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6 (NAO 216-6, May 20, 1999), concerning compliance with the National Environmental Policy Act (NEPA). This FONSI is supported by the environmental impact analysis prepared in accordance with the requirements of NEPA and documented in the attached environmental assessment (EA).

Background

Every year juvenile rabbitfish (*manahak)* recruit to Guam's nearshore areas in vast numbers to feed on algae. When first appearing, and prior to them eating algae, the small fish are harvested as a delicacy by local residents of Guam. After eating the algae, the rabbitfish are no longer palatable, and are called *dagge*. It is also believe that juvenile rabbitfish are subject to high levels of predation from other fish species and subject to mortality from starvation related to lack of juvenile habitat and quality food sources (algae).

The purpose of this project is to provide opportunities for youth education related to marine ecology, aquaculture, and traditional and contemporary practices and to support a stock enhancement program that would reduce juvenile natural mortality through on-land grow-out and reintroduction into the wild at larger sizes. It is believed that older, larger rabbitfish, as compared to sizes at first recruitment, are subject to less predation and have an easier time finding food.

For thousands of years, Guam fishermen have been targeting the *manahak* in hopes of catching them just prior to their first feeding on the algae. It has long been recognized that a healthy rabbitfish population provides socio-economic and cultural benefits to the people of Guam. Through project activities, participating students, fishermen, and other interested community members will gain knowledge of rabbitfish lifecycles, and importance of nearshore habitat to the species, which will promote conservation and management of this traditionally harvested species that holds considerable socio-cultural value on Guam.

Agencies Consulted, Approvals and Authorizations

To implement this project, the Council will work closely with the Guam 4H program, Guam Fishermen's Cooperative Association (GFCA), and the Department of Agriculture. NMFS' Habitat Protection and Protected Species Divisions were consulted on this project.

Significance Analysis

NAO 216-6 contains criteria for determining the significance of the environmental impacts of a proposed action. In addition, the Council on Environmental Quality's (CEQ) regulations at 40 CFR 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria for the selected alternative.

1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target and non-target species that may be affected by the action?

No. No adverse impacts to target and non-target species are expected to occur. Rabbitfish stocks are not overfished and are not experiencing overfishing. The grow out project will remove juvenile rabbitfish from the wild during their life span when they are subject to high levels of natural mortality and return larger less preyed-upon rabbitfish to the wild. Mortality during the grow-out phase is expected to be lower than the mortality levels in the wild, and so the action is expected to have a positive impact on survivorship rates of the collected juvenile rabbitfish. Non-target stocks that prey upon juvenile rabbitfish will also not be adversely affected. The small number of individuals to be collected will not provide a significant loss to the prey base of reef piscivores as these species are generalists and eat an array of fish species, and not only rabbitfish.

2) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans?

No. This project does not involve any physical alteration to any ocean or coastal habitat, and no potential damage to EFH. Only traditional throw nets will be used to capture *dagge* occurring over sandy areas. Areas of corals and other sensitive EFH will be avoiding during capture and release. Releasing the rabbitfish will involve hand-carrying transport containers and releasing the rabbitfish in shallow, nearshore sandy areas, which will be conducted in accordance with Best Management Practices.

4) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

No. This project is a community aquaculture project that has no impact on public health or safety as it is a temporary project, involving the nearshore collection of juvenile rabbitfish and the grow-out and release approximately 6 months later.Risks to public health are addressed through rigorous testing of the reared rabbitfish to prevent introduction of disease.

5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

No. This project does not involve an alternation to critical habitat for any ESA-listed species nor will impact any ESA-listed species or other marine mammal species. Only thrown nets will be used which allows for specific targeting of rabbitfish and avoidance of protected species. Best management practices described in Attachment A of the draft EA will be followed by fishermen and other project participants.

6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

No. A total of approximately 2,000 small rabbitfish (dagge) would be captured in the project from potentially four locations (Tumon, East Agana Bay, Pago Bay, and Paseo shoreline). Dagge are sometime found in seagrass and near corals; however, the use of throw nets will limit any impacts to the coral reefs or seagrass as the net will be case only over sandy bottom areas and not over corals. The weight of the nets also is such that it will not impact seagrass. In addition, throw netting is tended gear, which lessens the potential for bycatch. The number of fish collected is a minuscule fraction of the total Guam rabbitfish population and the throw net method used will not to any loss of ecosystem function or loss of biodiversity. The collection of the juvenile rabbitfish in one area and the reintroduction of the rabbitfish in another nearby location is not expected to have any impact on biodiversity or ecosystem function, because the amount of fish taken and returned to these areas will constitute a small percentage of the overall biomass in the original population

7) Are the effects on the quality of the human environment likely to be highly controversial?

No. This project is envisioned to have wide community support due to the traditional and socio-cultural importance of rabbitfish on Guam. In addition, the Guam community is supportive of marine education and outreach opportunities for youth.

8) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?

No. The project will not result in impacts to unique or ecologically critical areas. The collection and release of the rabbitfish will occur in sandy shallow water areas of less 10 feet deep in accordance with Best Management Practices.. The number of fish removed and reintroduced is a small percentage of the overall biomass in the population.

9) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

No. The fishing gear (hand-thrown cast net) to be used in this project well known in the Western Pacific Region as this technique is a traditional indigenous fishing gear. In addition, the project involves University of Guam's aquaculture facility which has experience in rearing rabbitfish and other finfish. Rabbitfish aquaculture operations and best practices are well known.

10) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

No. The effects of the implementation of the proposed action, coupled with other past and present actions, and all reasonably foreseeable future actions, would likely be beneficial but would not significantly impact the environment. The proposed project does not result in cumulative adverse impacts when added to existing conditions facing target stocks, protected species, and fishery participants on Guam. Only a relatively small number of rabbitfish will be harvested from the wild population, which would have undetectable effects on the rabbitfish population.

11) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

No. The proposed action is not the type of undertaking that would cause effect to historic properties, and we are unaware of any such properties in the action area. There would be no potential loss or destruction of significant scientific, cultural, or historical resources during the course of removal, grow-out, and re-release of a small number of rabbitfish.

12) Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

No. The Guam aquaculture facility is a biosecure facility that follows rigorous standards and protocols and does not allow water to be mixed between tanks, thus reducing the potential for species mixing. The release of the rabbitfish will involve the capture of small batches of rabbitfish at the aquaculture facility. Visual inspection of the catches will be conducted to ensure no other species would enter the transport tanks used to release the rabbitfish. .

13) Is the proposed action likely to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

No. The proposed action is limited to youth training and rabbitfish catch, grow-out, and release for a period of up to 3 years, and does not establish a precedent for future actions. There are ongoing aquaculture activities at the Guam aquaculture facility that are unrelated to the project. Any future projects proposed with NMFS funding or that may require federal permits would undergo independent review on a case by case basis.

14) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

No. The proposed action complies with requirements of Federal and local Guam law and would not require any federal or Guam permits.

Other Findings

NMFS also considered the effects of the project on climate change and climate change impacts on the feasibility of the project. The proposed action is not believed to exacerbate any on-going or future climate change impacts. Also, neither Alternative 1 (No Action) nor 2 (Proposed Action) would result in a change to Guam's inshore fishery that would affect climate change by substantially changing the consumption of energy or release of greenhouse gases by the fishery participants.

Determination

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment, I have determined that the proposed action will not significantly impact the quality of the human environment as described above and in the supporting EA.

In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement for this action is not necessary.

10/31/13

Michael D. Tosatto
Regional Administrator

Date