

levels expected to kill fish, if AChE measurements were taken of the fish carcass and correlate to fish death, if pesticides were applied in the general area, and if pesticide drift or runoff was witnessed or apparent.

NMFS notes that with increased monitoring and study of the impact of these pesticides on water quality, particularly water quality in off-channel habitats, NMFS will be able to refine this incidental take statement, and future incidental take statements, to allow other measures of the extent of take.

Reasonable and Prudent Measures

The measures described below are non-discretionary, and must be undertaken by the EPA so that they become binding conditions of any grant or permit issued to the applicant(s), as appropriate, for the exemption in section 7(o)(2) to apply. The EPA has a continuing duty to regulate the activity covered by this incidental take statement. If the EPA (1) fails to assume and implement the terms and conditions or (2) fails to require the applicant(s) to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the EPA must report the progress of the action and its impact on the species to NMFS OPR as specified in the incidental take statement. [50 CFR§402.14(i)(3)].

To satisfy its obligations pursuant to section 7(a)(2) of the ESA, the EPA must monitor (a) the direct, indirect, and cumulative impacts of its long-term registration of pesticide products containing carbaryl, carbofuran, and methomyl; (b) evaluate the direct, indirect, or cumulative impacts of pesticide misapplications in the aquatic habitats in which they occur; and (c) the consequences of those effects on listed Pacific salmonids under NMFS' jurisdiction. The purpose of the monitoring program is for the EPA to use the results of the monitoring data and modify the registration process in order to reduce exposure and minimize the effect of exposure where pesticides will occur in salmonid habitat.

The EPA shall:

1. Minimize the amount and extent of incidental take from use of pesticide products containing carbaryl, carbofuran, and methomyl by reducing the potential of chemicals reaching the water;
2. Monitor any incidental take or surrogate measure of take that occurs from the action; and
3. Report annually to NMFS OPR on the monitoring results from the previous season.

Terms and Conditions

To be exempt from the prohibitions of section 9 of the ESA, within one year following the date of issuance of this Opinion, the EPA must comply with the following terms and conditions.

These terms and conditions implement the reasonable and prudent measure described above.

These terms and conditions are non-discretionary.

1. a. EPA shall include the following instructions requiring reporting of fish kills either on the labels for all products containing carbaryl, carbofuran, and methomyl or in ESPP Bulletins:

NOTICE: Incidents where salmon appear injured or killed as a result of pesticide applications shall be reported to NMFS OPR at 301-713-1401 and EPA at 703-305-7695. The finder should leave the fish alone, make note of any circumstances likely causing the death or injury, location and number of fish involved, and take photographs, if possible. Adult fish should generally not be disturbed unless circumstances arise where an adult fish is obviously injured or killed by pesticide exposure, or some unnatural cause. The finder may be asked to carry out instructions provided by NMFS OPR to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

- b. EPA shall report to NMFS OPR any incidences regarding carbaryl, carbofuran, or methomyl effects on aquatic ecosystems added to its incident database that it has classified as probable or highly probable.

- c. Do not apply pesticide products when wind speeds are greater than or equal to 10 mph as measured using an anemometer immediately prior to application. When applying pesticide products, commence applications on the side nearest the aquatic habitat and proceed away from the aquatic habitat.

2. For all uses do not apply pesticide products when soil moisture is at field capacity, or when a storm event likely to produce runoff from the treated area is forecasted by NOAA/NWS (National Weather Service), to occur within 48 h following application.