A RESOLUTION AMENDING RESOLUTION R20040211 RELATING TO MONITORING AND ADAPTIVE MANAGEMENT OF CRITICAL AREAS IN CONJUNCTION WITH SKAGIT COUNTY CODE (SCC) 14.24.120(CRITICAL AREAS ON LANDS IN ONGOING AGRICULTURE) IN RESPONSE TO THE WESTERN WASHINGTON GROWTH MANAGEMENT HEARINGS BOARD'S COMPLIANCE ORDER NO. 02-2-0012C.

WHEREAS.

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**NOW, THEREFORE, BE IT RESOLVED** that ATTACHMENT 1 of Resolution R20040211 is hereby amended to read as follows:

Section (1) Expansion of the Existing Water Quality Monitoring Program

The Skagit County (County) Commissioners adopt an expanded and extensive "Water Quality Monitoring Program" (see attachment Exhibit A) for the County to provide trends and conditions water quality information and water quality benchmark information to assist in the County's implementation of Ordinance O20030020 regarding the protection of Ongoing Agriculture and Critical Areas, consistent with Best Available Science recommendations.

- (a) The County's water quality monitoring efforts shall consist of two types: (1) trend and conditions monitoring and (2) monitoring in response to a request for investigation, described in SCC 14.44.085.
- (b) Continuation and expansion of the County's monitoring program. The County will continue to monitor water quality trends or conditions initiated under Ordinance No. 18069, and as consistent with the approved water quality monitoring program following passage of Ordinance No. O20030020. Monitoring under this program will initially be for six consecutive years, followed by monitoring at five-year intervals thereafter. The intent of the monitoring is to identify water quality trends, accounting for variation, where possible, due to climatic difference, crop rotation, cycle of drainage maintenance or other regular variation in farming practices.
- (c) This monitoring program shall monitor the following parameters that are representative of Washington State water quality standards (WAC 173.201A) and measurements needed to characterize general water quality:
  - (i) Bacteria
  - (ii) Nutrients (nitrogen and phosphorus)
  - (iii) Sediments (total suspended solids and turbidity)
  - (iv) Dissolved oxygen
  - (v) Temperature
  - (vi) Conductivity

- (vii) Salinity
- (viii) pH
- (d) The County shall follow guidelines from United States Environmental Protection Agency (USEPA), Washington Department of Ecology (ECY), U.S. Geological Survey (USGS) and/or the Oregon Plan for Salmon and Watersheds for proper sampling methods and other required monitoring protocols for each parameter listed in subsection (c) above, generally as consistent with WAC 365-900 through 925 and the protocols established in the County's existing baseline monitoring program initiated under Ordinance No.18069 as referenced below:
  - (i) USEPA, "Environmental Monitoring and Assessment Program Surface Waters: Field Operations and Methods for Measuring the Ecological Condition of Wadeable Streams," EPA/620/R-94/004F (1998),
  - (ii) ECY, "Stream Sampling Protocols for the Environmental Monitoring and Trends Section," Publication No. 01-03-036 (2001),
  - (iii) USGS, "National Field Manual for the Collection of Water Quality Data, Techniques of Water Resources Investigations, Book 9," (1998), and
  - (iv) The Oregon Plan for Salmon and Watersheds, "Water Quality Monitoring Technical Guide Book," (1999).
- (e) The referenced protocols were used to develop a Quality Assurance Project Plan (QAPP)(Skagit County 2004) for the water quality monitoring program. This QAPP specifies the protocols to be used for water quality sampling and analysis and was approved by ECY in October, 2003 and amended in 2004. See, "Skagit County Monitoring Program Quality Assurance Project Plan," submitted to Washington Department of Ecology for Centennial Clean Water Fund Grant No. G0400133. (Approved October 2003, updated May, 2004).
- (ef) The County shall expand the total number of monitoring locations from the 27 locations monitored under Ordinance No. 18069 to a minimum of 40 locations, with a minimum of one monitoring location within each of the districts with drainage infrastructure and conducting drainage maintenance within the County. Monitoring locations shall be chosen to represent one of the following conditions:
  - (i) Locations downstream from agricultural influences to represent possible effects of agricultural land use activities on water quality. Water quality sites in the drainage infrastructure as close to the discharge of the drainage watercourse to salmonid bearing waters as practical.
  - (ii) Locations upstream from agricultural influences to represent background conditions.

- (iii) Locations sited to gather general water quality information and/or in support of TMDL development or implementation.
- (iv) Locations sited to determine existing conditions in receiving waters as practical.

## Section (2) Salmon Habitat Monitoring Program

The Skagit County Commissioners adopt the following Salmon Habitat Monitoring Program (see attachment Exhibit B) to provide trends and identify changes in these characteristics to assist in the County's implementation of Ordinance O20030020 regarding Ongoing Agriculture and Critical Areas, and to assist local, regional and state-wide salmon recovery efforts.

- (a) The County will conduct a baseline survey of physical channel and in-stream salmon habitat characteristics of representative salmon-bearing watercourses countywide prior to October 31, 2004. The County will continue to monitor these conditions, consistent with the approved salmon habitat baseline monitoring program to identify changes or trends in these conditions.
  - (i) The following physical channel and in-stream habitat conditions that will be measured are based on the following in-stream attributes and conditions that document and quantify the quality and quantity of salmonid habitat:
    - (A) Channel morphology
    - (B) Riparian condition
    - (C) In-channel structure
    - (D) Channel-bed composition
  - (ii) The County shall follow guidelines from Timber Fish and Wildlife (TFW), United States Geological Survey (USGS), United States Department of Agriculture Forest Service (USDA FS), Washington State Department of Natural Resources (WDNR), Washington State Department of Fish and Wildlife (WDFW), USEPA and/or other suitable guidelines for proper sampling methods and protocols for each condition listed above.
  - (iii) The County will select representative sampling reaches based on stream type, safe access, known salmonid utilization, and zoning.

### Section (3) Structure of and Process for Adaptive Management

The Skagit County Commissioners intend to use the Adaptive Management Process as described on page 31 of Volume 2 of "The Washington Comprehensive Monitoring Strategy for Watershed Health and Salmon Recovery" (December 2002). The County will utilize this process for 1) the water quality monitoring focus of SCC 14.24.120, and 2) the channel and salmon habitat survey to be done on representative watercourses countywide. The County recognizes

this process is a theoretical model, and that by itself, the County cannot complete the entire process, especially in regards to adequately enhancing fish habitat to achieve salmon recovery county wide. Nevertheless, the County also recognizes that its efforts will contribute valuable and much needed new information that will be useful to all entities working towards the success of the entire process.

The best method to ensure that management activities accomplish their intended purpose is to adopt an adaptive management process. In the instance of the Ag CAO, the purpose of management activities are two fold: 1) to protect the existing functions and values of Fish and Wildlife Habitat Conservation areas (FWHCA) in and adjacent to Natural, Modified Natural and Artificial Watercourses as defined in SCC 14.04.020 (collectively "Watercourses"), and 2) to conserve and protect agricultural lands of long-term commercial significance, specifically those lands in Ongoing Agricultural activity as defined by SCC 14.04.020 that are located adjacent to these Watercourses.

Adaptive management is a process that allows decision makers to modify their course of action (i.e., policies, procedures, programs, and projects) in response to information or data generated through rigorous evaluation of those actions. Modifications of or changes to the course of action should be undertaken when information indicates those actions are not having the intended results. In this case, the intended results are the protection of the existing functions and values of Fish and Wildlife Habitat Conservation Areas while at the same time not creating conditions that jeopardize the conservation and protection of agricultural lands of long term commercial significance. The adaptive management process requires several management steps:

- Assessment and Planning Assessment involves an evaluation of existing information about the current resource condition. This step may also include detailed analyses, inventories, or baseline assessments. The planning step involves evaluating existing information, making provisions to collect additional information if necessary, and developing a strategy that clearly outlines the goals, objectives, and performance measures for management actions.
- Implementation The implementation step involves carrying out the management action(s) defined in the Assessment and Planning step.
- Monitoring The monitoring phase involves the systematic collection of data and/or information defined in the Assessment and Planning step.
- Analysis, Evaluation, and Reporting The monitoring data must be analyzed and conclusions developed. Evaluation requires a comparison of the monitoring results to the desired results. The information must be reported to the decision makers.
- Modifying or Adapting Management must adapt or adjust policies or programs
  if results are not achieving performance objectives or satisfactory results.
- (a<u>f</u>) Water Quality Status and Trends Monitoring

- (i) The County shall contact agencies with expertise, tribal interests and with other interested parties regarding proposed revised water quality monitoring locations (attachment Appendix A) proposed sampling methods and monitoring protocols on or before August 1, 2003, and shall provide an opportunity for public review and comment. The County shall implement this expanded and revised water quality monitoring program by October 1, 2003.(ii) The County shall coordinate its monitoring efforts under this resolution with state or federal agencies conducting water quality monitoring, as well as tribal entities and other interest groups involved in water quality monitoring efforts, provided such other monitoring efforts are consistent and/or compatible with the guidelines and protocols described in Section 1(d) above.
- (iiii) Water quality data will be analyzed for trends using the Seasonal Kendall's Test or similar statistical tools. Analysis of water quality data will take into account underlying climate conditions and land use activities upstream of the agricultural area. Significant negative trends in water quality not associated with changes in climate or non agricultural land use activities may provide evidence of failure of Ordinance O20030020 to meet the No Harm of Degradation Standard.
- (iviii) The County shall prepare an annual report for the first six consecutive years, and at five-year intervals thereafter of its water quality monitoring program and shall submit the report to the Washington State Department of Ecology (ECY), post the report on the County website, and make copies available to other interested parties. The monitoring reports shall include any recommendations or corrective sampling actions including sampling locations, parameters, timing, frequency, and duration. If the annual report indicates a continuing state water quality violation in a Watercourse, the County shall submit the data for the Watercourse to ECY for ECY to determine whether the Watercourse should be listed as impaired pursuant to 303(d) listing requirements found in ECY Water Quality Program Policy 1-11, "Assessment of Water Quality for the Section 303(d) List". The County shall cooperate with ECY in ECY's preparation of a TMDL for the listed Watercourse and shall take any local actions deemed necessary to assist ECY in the implementation of the TMDL. The annual monitoring reports shall be considered in the three (3) year review for adaptive management described in Section 3 (c) below.
- (iv) If at any time the statistical analysis of the monitoring data conclusively demonstrates that the current Watercourse Protection Measures specified in SCC 14.24.120(4) are not sufficient to meet the requirements of the State Water Pollution Control Act (RCW 90.48) and the State Water Quality Standards (WAC 173-251) the No Harm or Degradation Standard, then the County shall consult with the Skagit Conservation District, the Natural Resource Conservation Service, the Washington Department of Ecology, the Washington Department of Fish and Wildlife, and/or other state or federal agencies with jurisdiction or technical expertise to recommend revisions, or amendments or to assist in the development

of new Watercourse Protection Measures sufficient to meet these state standards and requirements and the No Harm or Degradation Standard and sufficient to meet the County's GMA obligations to preserve and protect agriculture. If any changes to the Watercourse Protection Measures are deemed necessary to meet these state standards and requirements, the No Harm or Degradation Standard, proposals to amend, revise or add new requirements to the County's critical areas ordinance (SCC 14.24) will be considered by the County, at a minimum, consistent with the 3 year evaluation of the regulatory and monitoring program described in Section 3 (c) below.

### (b) Salmon Habitat Status and Trends Monitoring

- (i) The County shall contact agencies and other groups involved in salmon recovery efforts——prior to the development and implementation of the county wide baseline survey of salmon habitat conditions. The County shall coordinate its representative survey efforts with state and/or federal agencies conducting habitat monitoring, as well as tribal entities and other interest groups involved in similar efforts, provided such efforts are consistent and/or compatible with the programs, guidelines and protocols described in Section 2 above.
  - (ii) The County will prepare salmon habitat survey reports consistent with the approved Salmon Habitat Monitoring Program [referenced in Section (2) above] of current salmon habitat watercourse conditions and once the surveys have been completed to make them available to all interested parties. The County will coordinate with agencies and groups involved in salmon habitat recovery efforts to make best use of this information and determine where to focus more intensive habitat monitoring, if needed. The County will submit the reports to WDFW for their information, post the reports on the County website, with copies made available to other interested parties. The reports prepared by the County will be available for the 3 year evaluation of the regulatory and monitoring program process described in Section 3 (c) below.
  - (iii) Habitat conditions will be surveyed consistent with the approved Salmon Habitat Monitoring Program (Section 2 above) annually for a few representative sites and in five-year intervals thereafter for a larger number of representative sites for the purpose of determining whether trends in habitat conditions are improved, degraded or unchanged.
- (iv) If, at any time after the habitat conditions are inventoried, the information conclusively demonstrates that the current watercourse protection measures specified in SCC 14.24.120(4) are not sufficient to meet the No Harm or Degradation Standard for fish habitat [SCC 14.24.120(3)(a)(v)], then the County will consult with the Skagit Conservation District, the Natural Resource Conservation Service, Washington State University Extension, the Washington Department of Ecology, the Washington Department of Fish and Wildlife, Washington State Department of Agriculture, and/or other state or federal

agencies with jurisdiction or technical expertise to recommend revisions, amendments or to new Watercourse Protection Measures sufficient to meet the No Harm or Degradation Standard and sufficient to meet the County's GMA obligations to preserve and protect agriculture. If any changes to the Watercourse Protection Measures are deemed necessary to meet the No Harm or Degradation Standard they shall, at a minimum, be proposed for consideration at the 3 year evaluation of the regulatory and monitoring program described in Section 3 (c) below.

### (c) 3 year Evaluation of the Regulatory and Monitoring Program

At least every three years Skagit County will provide an opportunity for the public to review, comment on, and propose changes to Skagit County Code 14.24 Critical Areas Ordinance, based on information contained in the water quality and salmon habitat survey reports described in this resolution. The review will include a public hearing consistent with the public participation requirements of the RCW 36.70A (State Growth Management Act) and SCC 14.08 (Legislative Actions) and will result in public comment and a planning agency report with recommendations being forwarded to the Skagit County Board of Commissioners (BCC). The planning agency report will include an analysis and discussion of public and resource agencies, comments and data obtained by the County's own monitoring efforts. The Board of Skagit County Commissioners shall take legislative action to review and take action on any proposal, and if needed, revise the SCC and/or the associated monitoring programs described in this resolution, based on the information contained in the annual reports to ensure the No Harm or Degradation Standard is being met. This legislative action may be appealed pursuant to the provisions of RCW 36.70A.130 (1)(a).

### Section (4) Adoption of Water Quality Monitoring and Salmon Habitat Survey Programs

The Board of Skagit County Commissioners will formally adopt by resolution the water quality monitoring and salmon habitat monitoring programs specified in Sections 1 and 2 of this Resolution.

### Section (53) Local, Regional and State-wide Salmon Recovery Efforts

The Board of Skagit County Commissioners commits to cooperate with, be actively involved in, and be supportive of local, regional and statewide efforts that have as their purpose the protection, restoration and enhancement of the functions and values of Watercourses and/or to bring back and protect threatened salmon runs in Skagit County, including:

- Skagit Watershed Council,
- Skagit Fisheries Enhancement Group,

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Skagit Conservation District,

• Relevant projects of the Skagit Council of Governments,	
• State's Shared Strategy program,	
Skagit Marine Resources Committee,	
• Skagit County's own watershed planning under WAC 400-12	
Skagit County's own restoration efforts, and	
Other efforts as available and appropriate.	
The County commits to taking a more active role and/or the lead in such efforts, proche state or other parties provide funding for salmon recovery efforts. The Count aggressively seek out appropriate grant opportunities to help fund County initiated restorations and programs. The County will also pursue cooperative restoration efforts with other entities and districts within Skagit County to promote projects that involve multiple beneficially controlled to the county in the county of the county to promote projects that involve multiple beneficially controlled to the county in the county of the county to promote projects that involve multiple beneficially controlled to the county of the county	ty will rations er local
DATED THISDAY OF, 2007.	
BOARD OF COUNTY COMMISSIONERS SKAGIT COUNTY, WASHINGTON	
Sharon Dillon, Chair	
Ken Dahlstedt	
Don Munks	