

1 **5 AAC 75.XXX. POLICY FOR THE MANAGEMENT OF SUSTAINABLE WILD**
2 **TROUT FISHERIES.**

3 (a) The Board of Fisheries (board) and Department of Fish and Game (department)
4 recognize that:

5 (1) Alaska's wild trout and their attendant ecosystems in Alaska are important to
6 Alaskans, their quality of life, and the Alaskan economy. Accordingly, the State has
7 long recognized the value of these fish in its management;

8 (2) Many wild trout populations have been depleted or have disappeared from much
9 of their range around the world. Alaska's wild trout populations are still largely intact
10 and robust, largely because of remote locations and limited access to large numbers of
11 people, abundant pristine habitat and the history and application of sound,
12 precautionary, conservation management practices. Recognizing that Alaska's trout
13 now represent the world's greatest spectrum of genetic diversity and acknowledging
14 the potential for irreversible loss of genetic integrity due to human activity, a
15 comprehensive policy for the regulation and management of wild trout fisheries is
16 essential to protect this precious biological resource in perpetuity;

17 (3) In formulating new or modifying existing fishery management strategies,
18 objectives, or plans under 5 AAC 75.XXX (*Statewide Wild Trout Fishery*
19 *Management Plan*) designed to achieve optimum sustained yield and provide
20 maximum benefits from Alaska's wild trout, the board and department must consider
21 factors including environmental change, habitat loss or degradation, data uncertainty,
22 limited funding for research and management programs, and existing regulatory
23 regimes; and,

24 (4) To effectively assure optimum sustained yield and benefits and habitat protection
25 for wild trout stocks, fishery management plans and programs require specific
26 guiding principles and criteria, and the framework for their application contained in
27 this policy.

28 (b) The goal of the policy under this section is to ensure conservation, sustainability, and
29 optimum sustained yield and benefits of wild trout and their attendant ecosystems.

30 (c) Management of wild trout fisheries should be based on the following principles and
31 criteria:

32 (1) Wild trout stocks and their habitats should be maintained at levels of resource
33 productivity that assure for their optimum sustained yield and benefits as follows:

34 (A) Wild trout spawning, rearing, and migratory habitats should be protected as
35 follows:

- 36 (i) wild trout habitats should not be perturbed beyond natural boundaries of
37 variation;
- 38 (ii) scientific assessments of possible adverse ecological effects of proposed
39 habitat alterations and the impacts of the alterations on wild trout stocks should
40 be conducted before approval of a regulatory proposal;
- 41 (iii) adverse environmental impacts on wild trout stocks and their habitats
42 should be assessed;
- 43 (iv) all essential wild trout habitat in marine, estuarine, and freshwater
44 ecosystems and access of wild trout to these habitats should be protected;
45 essential habitats include spawning and incubation areas, freshwater feeding and
46 over-wintering areas, estuarine and nearshore rearing areas, offshore rearing
47 areas, and migratory pathways; and,
- 48 (v) wild trout habitat in fresh water should be protected on a watershed basis,
49 including appropriate management of riparian zones, water quality, and water
50 quantity (instream flows);
- 51 (B) Wild trout stocks should be protected within their spawning, incubating,
52 rearing, and migratory habitats;
- 53 (C) Degraded wild trout productivity resulting from habitat loss should be assessed,
54 considered, and controlled by affected user groups, regulatory agencies, and boards
55 when making conservation and allocation decisions;
- 56 (D) Effects and interactions of introduced or enhanced species or stocks on wild
57 trout stocks should be assessed; wild trout stocks and fisheries on those stocks
58 should be protected from adverse impacts from artificial propagation and
59 enhancement efforts;
- 60 (E) Degraded wild trout spawning, incubating, rearing, and migratory habitats
61 should be restored to natural productivity;
- 62 (F) Ongoing monitoring should be conducted to determine the current status of
63 habitat and the effectiveness of restoration activities; and,
- 64 (G) Depleted wild trout stocks should be allowed to recover; diversity should be
65 maintained to the maximum extent possible, at the genetic, population, species, and
66 ecosystem levels;
- 67 (2) Wild trout populations shall be managed for their optimal sustained yield and
68 benefits as follows:

- 69 (A) Wild trout populations and their trends should be assessed both temporally and
70 geographically; fishery monitoring programs should be appropriate to the scale,
71 intensity, and importance of each wild trout stock's use;
- 72 (B) Wild trout populations shall be managed in a manner consistent with their
73 optimal sustained yield and benefits; unless otherwise directed, the department will
74 manage Alaska's wild trout fisheries, to the extent possible, to maintain desired size
75 compositions and stock levels;
- 76 (C) Wild trout populations shall not be subject to enhancement or supplementation;
- 77 (D) Wild trout management should allow for uncertainty associated with
78 measurement and assessment techniques, observed variability in the wild trout stock
79 measured, changes in climatic, aquatic and oceanographic conditions, and varying
80 abundance within related populations of the wild trout stock measured;
- 81 (E) Wild trout should be managed in a manner to maintain genetic and phenotypic
82 characteristics of the stock by assuring appropriate geographic and temporal
83 distribution of spawners as well as consideration of size range, sex ratio, and other
84 population attributes;
- 85 (F) Impacts of fishing, including incidental mortality, should be assessed and
86 considered in harvest management decisions;
- 87 (G) Wild trout harvest management decisions should be made in a manner that
88 protects non-target stocks or species;
- 89 (H) The role of wild trout in ecosystem functioning should be evaluated and
90 considered in the setting of wild trout management strategies; and,
- 91 (I) Food sources important to wild trout populations should be identified where
92 feasible and incorporated into management decisions.
- 93 (3) Effective management systems should be established and applied to regulate
94 human activities that affect wild trout as follows:
- 95 (A) Wild trout management objectives should be appropriate to the scale and
96 intensity of various uses and the biological capacities of target wild trout stocks;
- 97 (B) Management agencies should have clear authority in statute and regulation to:
- 98 (i) when practicable, control all sources of fishing mortality on wild trout; and,
99 (ii) protect wild trout habitats and control non-fishing sources of mortality;
- 100 (C) Management programs should be effective in:

- 101 (i) controlling human-induced sources of fishing mortality and should
102 incorporate procedures to assure effective monitoring, compliance, control, and
103 enforcement; and,
- 104 (ii) protecting wild trout habitats and controlling collateral mortality and should
105 incorporate procedures to assure effective monitoring, compliance, control, and
106 enforcement;
- 107 (D) Fisheries management implementation and outcomes should be consistent with
108 regulations, regulations should be consistent with statutes, and effectively carry out
109 the purpose of this section;
- 110 (E) The board will recommend to the commissioner the development of effective
111 joint research, assessment, and management arrangements with appropriate
112 management agencies and bodies for wild trout stocks that cross state, federal, or
113 international jurisdictional boundaries. The board will recommend the coordination
114 of appropriate procedures for effective monitoring, compliance, control, and
115 enforcement with those of other agencies, states, or nations;
- 116 (F) The board will work, within the limits of its authority, to assure that:
- 117 (i) management activities are accomplished in a timely and responsive manner
118 to implement objectives, based on the best available scientific information;
- 119 (ii) effective mechanisms for the collection and dissemination of information
120 and data necessary to carry out management activities are developed,
121 maintained, and utilized; and,
- 122 (iii) management programs and decision-making procedures are able to clearly
123 distinguish, and effectively deal with, biological and allocation issues;
- 124 (G) The board will recommend to the commissioner and legislature that adequate
125 staff and budget for research, management, and enforcement activities be available
126 to fully implement sustainable wild trout fisheries principles;
- 127 (H) The board will consider, and where appropriate adopt, options to maintain
128 diversity of experience in wild trout fisheries;
- 129 (I) The board will adopt gear regulations that assure for minimal levels of injury
130 and mortality to wild trout;
- 131 (J) The board will work with the commissioner and other agencies to develop
132 effective processes for maintaining benefits and diversity;
- 133 (K) Procedures should be implemented to regularly evaluate the effectiveness of
134 fishery management and habitat protection actions in sustaining wild trout

- 135 populations, fisheries, and habitat, and to resolve associated problems or
136 deficiencies;
- 137 (L) Conservation and management decisions for wild trout fisheries should take into
138 account the best available information on biological, environmental, economic,
139 social, and resource use factors;
- 140 (M) Research and data collection should be undertaken to improve scientific and
141 technical knowledge of wild trout fisheries, including ecosystem interactions, status
142 of wild trout populations, and the condition of wild trout habitats; and,
- 143 (N) The best available scientific information on the status of wild trout populations
144 and the condition of the wild trout's habitats should be routinely updated and
145 subject to peer review;
- 146 (4) Public support and involvement for sustained use and protection of wild trout
147 resources should be sought and encouraged as follows:
- 148 (A) The board will work with the department and the public to determine the
149 benefits desired for wild trout and whether the current opportunities are meeting
150 these desires. Identified benefits should promote quality of experience, diversity of
151 opportunity, conservative consumptive harvest opportunity, and economic benefits
152 and implemented by management objective;
- 153 (B) Effective mechanisms for dispute resolution should be developed and used;
- 154 (C) Pertinent information and decisions should be effectively disseminated to
155 Advisory Committees and all other interested parties in a timely manner;
- 156 (D) The board's regulatory management and allocation decisions will be made in an
157 open public involvement process;
- 158 (E) An understanding of the proportion of mortality inflicted on each wild trout
159 stock by each user group, should be conveyed, and the burden of conservation
160 should be allocated across user groups in a manner consistent with applicable state
161 and federal statutes. In the absence of a regulatory management plan that otherwise
162 allocates or restricts uses, and when it is necessary to restrict fisheries on wild trout
163 stocks where there are known conservation problems, the burden of conservation
164 shall be shared among all fisheries in close proportion to each fisheries' respective
165 use, consistent with state and federal law; and,
- 166 (F) The board will work with the commissioner, other agencies, Advisory
167 Committees, and Legislature as necessary to assure that adequately funded public
168 information and education programs provide timely materials on wild trout
169 conservation, including habitat requirements, threats to wild trout habitat, the value
170 of wild trout and habitat to the public and ecosystem (fish and wildlife), natural

- 171 variability and population dynamics, the status of wild trout stocks and fisheries,
172 and the regulatory process;
- 173 (5) In the face of uncertainty, wild trout stocks, fisheries, and essential habitats shall
174 be managed conservatively as follows:
- 175 (A) A precautionary approach, involving the application of prudent foresight that
176 takes into account the uncertainties in wild trout fisheries and habitat management;
177 the biological, social, cultural, and economic risks; and, the need to take action with
178 incomplete knowledge, should be applied to the regulation and control of harvest
179 and other human-induced sources of wild trout mortality. A precautionary
180 approach requires:
- 181 (i) consideration of the needs of future generations and avoidance of potentially
182 irreversible changes;
- 183 (ii) prior identification of undesirable outcomes and of measures that will avoid
184 undesirable outcomes or correct them promptly;
- 185 (iii) initiation of any necessary corrective measure without delay and prompt
186 achievement of the measure's purpose;
- 187 (iv) that where the impact of resource use is uncertain, priority should be given
188 to conserving the productive capacity of the resource; and,
- 189 (v) that the appropriate burden of proof is placed on those plans or ongoing
190 activities that pose a risk or hazard to wild trout habitat or production;
- 191 (B) A precautionary approach should be applied to the regulation of activities that
192 affect essential wild trout habitat.
- 193 (d) The principles and criteria for wild trout fisheries shall be applied, by the department
194 and the board, using the best available information, as follows:
- 195 (1) At regular meetings of the board, the department will, to the extent practicable,
196 provide the board with reports on the status of wild trout stocks and fisheries under
197 consideration for regulatory changes, which should include:
- 198 (A) A stock-by-stock assessment of the extent to which the management of wild
199 trout stocks and fisheries is consistent with the principles and criteria contained in
200 the policy under this section;
- 201 (B) Descriptions of habitat status and any habitat concerns;
- 202 (C) Identification of healthy wild trout stocks and sustainable wild trout fisheries;
203 and,

- 204 (D) Identification of any existing wild trout management actions needed to achieve
205 these goals, that may have allocative consequences such as the:
- 206 (i) identification of any wild trout stocks, or populations within stocks, that
207 present a concern related to conservation or optimal sustained yield; and,
- 208 (ii) description of management and research options to address wild trout stock
209 or habitat concerns;
- 210 (E) Food sources important to wild trout populations should be identified where
211 feasible.
- 212 (2) In response to the department's wild trout stock status reports, reports from other
213 resource agencies, and public input, the board will review the management plan, or
214 consider developing a management plan, for each affected wild trout fishery or stock.
215 Management plans will be based on the principles and criteria contained in this policy
216 and will:
- 217 (A) Contain goals and measurable and implementable objectives that are reviewed
218 on a regular basis and utilize the best available scientific information;
- 219 (B) Minimize, as practicable, the adverse effects on wild trout habitat caused by
220 fishing;
- 221 (C) Protect, restore, and promote the long-term health and sustainability of the wild
222 trout fishery and habitat;
- 223 (D) Provide, where feasible, recommendations regarding food sources into existing
224 salmon escapement goals.
- 225 (E) Prevent overfishing; and,
- 226 (F) provide conservation and management measures that are necessary and
227 appropriate to promote optimum sustained yield and benefits of the wild trout
228 fishery resource;
- 229 (3) In the course of review of the wild trout stock status reports and management
230 plans described in (1) and (2) of this subsection, the board, in consultation with the
231 department, will determine if sustainability or optimal sustained yield concerns exist.
232 If so, the board will, as appropriate, amend or develop wild trout fishery management
233 plans to address these concerns. The extent of regulatory action, if any, should be
234 commensurate with the level of concerns and range from milder to stronger as
235 concerns range through sustainability and optimal sustained yield concerns;
- 236 (4) In association with the appropriate management plan, the department and the
237 board will, as appropriate, collaborate in the development and periodic review of an

238 action plan for any new or expanding wild trout fisheries, or stocks of concern; action
239 plans should contain goals, measurable and implementable objectives, and provisions,
240 including:

241 (A) Measures required to restore and protect wild trout habitat, including necessary
242 coordination with other agencies and organizations;

243 (B) Identification of wild trout stock or population rebuilding goals and objectives;

244 (C) Fishery management actions needed to achieve rebuilding goals and objectives,
245 in proportion to each fishery's use of, and hazards posed to, a wild trout stock;

246 (D) Descriptions of conservation or optimal sustained yield concerns; and,

247 (E) Performance measures appropriate for monitoring and gauging the effectiveness
248 of the action plan that are derived from the principles and criteria contained in this
249 policy.

250 (5) Each action plan will include a research plan as necessary to provide information
251 to address concerns. Research needs and priorities will be evaluated periodically,
252 based on the effectiveness of the monitoring described in (4) of this subsection; and,

253 (6) Where actions needed to regulate human activities that affect wild trout and wild
254 trout's habitat that are outside the authority of the department or the board, the
255 department or board shall correspond with the relevant authority, including the
256 governor, relevant boards and commissions, commissioners, and chairs of appropriate
257 legislative committees, to describe the issue and recommend appropriate action.

258 (e) Nothing in the policy under this section is intended to expand, reduce, or be
259 inconsistent with, the statutory regulatory authority of the board, the department, or other
260 state agencies with regulatory authority that impacts the fishery resources of the state.

261 (f) In this section, and in implementing this policy and 5 AAC 75.XXX (*Statewide Wild*
262 *Trout Fishery Management Plan*):

263 (1) "depleted wild trout stock" means a wild trout stock for which there is a
264 sustainability concern;

265 (2) "diversity", in a biological context, means the range of variation exhibited within
266 any level of organization, such as among genotypes within a wild trout population,
267 among populations within a wild trout stock, among wild trout stocks within a
268 species, among wild trout species within a community, or among communities within
269 an ecosystem;

270 (3) "escapement" means the annual estimated number of the wild spawning steelhead
271 stock; quality of the escapement may be determined not only by numbers of

- 272 spawners, but also by factors such as sex ratio, temporal entry into the system, and
273 spatial distribution within the spawning habitat;
- 274 (4) "genetic" means those characteristics (genotypic) of an individual or group of wild
275 trout that are expressed genetically, such as allele frequencies or other genetic
276 markers;
- 277 (5) "habitat concern" means the degradation of wild trout habitat that results in, or can
278 be anticipated to result in, impacts leading to a sustainability or optimum sustained
279 yield, population, or benefit concern;
- 280 (6) "healthy wild trout stock" means a wild trout stock that is able to sustain a
281 specified optimal sustained yield benefit management objective such that stocking is
282 not required and which is characterized by fishing activities and habitat alteration, if
283 any, that do not cause or lead to significant undesirable changes in biological
284 productivity, biological diversity, or ecosystem structure and function, from one
285 human generation to the next;
- 286 (7) "incidental harvest" means the harvest of fish, or other species, that is captured in
287 addition to the target species of a fishery;
- 288 (8) "incidental mortality" means the mortality imposed on a wild trout stock other
289 than directed harvest, and includes mortality caused by incidental harvests, interaction
290 with fishing gear, habitat degradation, and other human-related activities;
- 291 (9) "optimal sustained yield" means an average annual yield from a stock considered
292 to be optimal in achieving a specified management objective designed to attain a
293 specified benefit while maintaining healthy stock status and genetic integrity.
294 Benefits include, but are not limited to, quality of experience, diversity of
295 opportunity, conservative consumptive harvest opportunity, and economic benefits.
- 296 (10) "optimal sustained yield concern" means a threshold level of size composition,
297 genetic diversity, and abundance below which the ability of the wild trout stock to
298 maintain a desired optimal sustained yield management objective is jeopardized;
- 299 (11) "overfishing" means a level of fishing on a wild trout stock that results in a
300 sustainability or optimal sustained yield concern;
- 301 (12) "phenotypic characteristics" means those characteristics of an individual or
302 group of wild trout that are expressed physically, such as body size and length at age;
- 303 (13) "stock of concern" means a stock of wild trout for which there is a sustainability
304 or optimum sustained yield concern;

305 (14) "sustainability concern" means indications of a trend expected to result in a
306 threshold level of size composition, genetic diversity, and abundance below which the
307 ability of the wild trout stock to sustain itself is jeopardized;

308 (15) trout means rainbow or steelhead (*Oncorhynchus mykiss*) or cutthroat (*Salmo*
309 *clarki*) trout);

310 (15) "wild trout population" means a locally interbreeding group of wild trout that is
311 distinguished by a distinct combination of genetic, phenotypic, life history, and
312 habitat characteristics, comprised of an entire stock or a component portion of a
313 stock; the smallest uniquely identifiable spawning aggregation of genetically similar
314 wild trout used for monitoring purposes;

315 (16) "wild trout stock" means a locally interbreeding group of wild trout that is
316 distinguished by a distinct combination of genetic, phenotypic, life history, and
317 habitat characteristics or an aggregation of two or more interbreeding groups which
318 occur within the same geographic area and is managed as a unit;