1 Chapter 15.20

2 FLOOD DAMAGE PREVENTION*

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- 28 * Prior ordinance history: Resolutions 8937, 9243, 9244, 9316 and 9320; and Ordinances 7947,
- 29 8770, 10225 and 10331.
- 30

31 15.20.010 Statutory authorization.

- 32 The Legislature of the State of Washington has in RCW Chapter 36.70 delegated the
- 33 responsibility to local governmental units to adopt regulations designed to promote the public
- 34 health, safety, and general welfare of its citizenry. Therefore, the County of Skagit, State of
- 35 Washington, does ordain the provisions set forth in this chapter.
- 36 (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 37

38 15.20.020 Findings of fact.

- 39 (1) The flood hazard areas of Skagit County are subject to periodic inundation which results
- 40 in loss of life and property, health and safety hazards, disruption of commerce and
- 41 governmental services, extraordinary public expenditures for flood protection and relief, and
- 42 impairment of the tax base, all of which adversely affect the public health, safety and general
- 43 welfare.
- 44 (2) These flood losses are caused by the cumulative effect of obstructions in areas of special
- 45 flood hazards which increase flood heights and velocities, and when inadequately anchored,
- 46 damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise
- 47 protected from flood damage also contribute to the flood loss.
- 48 (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 49

50 15.20.030 Statement of purpose.

- 51 It is the purpose of this chapter to promote the public health, safety, and general welfare, and
- 52 to minimize public and private losses due to flood conditions in specific areas by provisions
- 53 designed:
- 54 (1) To protect human life and health;
- 55 (2) To minimize expenditure of public money and costly flood control projects;
- 56 (3) To minimize the need for rescue and relie f efforts associated with flooding and generally
- 57 undertaken at the expense of the general public;
- 58 (4) To minimize prolonged business interruption;
- 59 (5) To minimize damage to public facilities and utilities such as water and gas mains,
- 60 electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- 61 (6) To help maintain a stable tax base by providing for the sound use and development of
- 62 areas of special flood hazard so as to minimize future flood blight areas;
- 63 (7) To ensure that potential buyers are notified that property is in an area of special flood
- 64 hazard; and
- 65 (8) To ensure that those who occupy the areas of special flood hazard assume responsibility
- 66 for their actions. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 67

68 **15.20.040 Methods of reducing flood losses.**

- 69 In order to accomplish its purpose, this chapter includes methods and provisions for:
- 70 (1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to
- 71 water or erosion hazards, or which result in damaging increases in erosion or in flood heights 72 or velocities:
- 73 (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be
- 74 protected against flood damage at the time of initial construction;
- 75 (3) Controlling the alteration of natural floodplains, stream channels, and natural protective
- 76 barriers, which help accommodate or channel floodwaters;
- 77 (4) Controlling filling, grading, dredging, and other development which may increase flood 78
- damage; and
- 79 (5) Preventing or regulating the construction of flood barriers which will unnaturally divert
- 80 floodwaters or which may increase floodhazards in other areas. (Ord. 16311 (part), 1996: Ord.
- 81 11888 (part), 1988: Ord. 11216 (part), 1987)
- 82

83 15.20.050 Definitions.

- 84 Unless specifically defined below, words or phrases used in this Chapter shall be interpreted
- 85 so as to give them the meaning they have in common usage and to give this Chapter its most 86 reasonable application.
- 87 (1) "Appeal" means a request for a review of the Planning Director or his designee's
- 88 interpretation of any provision of this Chapter.
- 89 (2) "Area of Shallow Flooding" means a designated AO or AH zone on the flood insurance
- 90 rate map (FIRM). The base flood depths range from one (1) to three (3) feet; a clearly defined
- 91 channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity
- 92 flow may be evident. AO is characterized as sheet flow and AH indicates ponding.
- 93 (3) "Area of Special Flood Hazard" means the land in the floodplain within a community
- 94 subject to a one (1) percent or greater chance of flooding in any given year. Designation on
- 95 maps always includes the letters A or V.
- 96 (4) "Base flood" means the flood having a one (1) percent chance of being equaled or
- 97 exceeded in any given year.
- 98 (5) "Best available information" means in the absence of official flood insurance rate map

- 99 data, communities can use data from other federal, state, or other sources provided this data
- has either been generated using technically defensible methods or is based on reasonable
 historical analysis and experience.
- 102 (6) "Breakaway walls" means any type of walls, whether solid or lattice, and whether
- 103 constructed of concrete, masonry, wood, metal, plastic, or any other suitable building material
- 104 which are not part of the structural support of the building and which are so designed as to
- 105 break away, under abnormally high tides or wave action, without damage to the structural
- 106 integrity of the building on which they are used or any buildings in which they might be
- 107 carried by floodwaters.
- 108 (7) "Coastal high hazard area" means the area subject to high velocity waters, including but
- 109 hot limited to storm surge or tsunamis. The area is designated on a FIRM as Zone V1 30.
- 110 (8) "Critical facility" means a facility for which even a slight chance of flooding would be
- 111 too great. Critical facilities include but are not limited to schools, hospitals, police, fire, and
- 112 emergency response installations, nursing homes, installations which produce, use, or store
- 113 hazardous materials or hazardous waste.
- 114 (9) "Development" means any manmade change to improved or unimproved real estate,
- 115 including but not limited to buildings or other structures, mining, dredging, filling, grading,
- 116 paving, excavation, or drilling operations located within the area of special flood hazard.
- 117 (10) "Dwelling unit" means a structure or that part of a structure which is used as a
- 118 home, residence, or sleeping place by one or more persons maintaining a common household,
- 119 including but not limited to single family residences and multiplexed units, apartment
- 120 buildings, and mobile homes or manufactured homes.
- 121 (11) "Flood" or "flooding" means a general and temporary condition of partial or
- 122 complete inundation of normally dry land areas from:
- 123 (a) The overflow of in land or tidal waters; and/or
- 124 (b) The unusual and rapid accumulation of runoff or surface waters from any source.
- 125 (12) "Flood insurance rate map" (FIRM) means the official map on which the Federal
- 126 Insurance Administration has delineated both the areas of special flood hazards and the risk
- 127 premium zones applicable to the community.
- 128 (13) "Flood insurance study" means the official report provided by the Federal
- 129 Insurance Administration that includes flood profiles, the flood boundary floodway map, and
- 130 the water surface elevation of the base flood.
- 131 (14) "Flood protection elevation" means one foot above the base flood elevation.
- 132 (15) "Floodway" means the channel of a river or other watercourse and the adjacent
- 133 land areas that must be reserved in order to discharge the base flood without cumulatively
- 134 increasing the water surface elevation more than one (1) foot.
- 135 (16) "Lowest floor" means the lowest floor of the lowest enclosed area (including
- 136 basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles,
- 137 building access or storage, in an area other than a basement area, is not considered a building's
- 138 lowest floor, provided that such enclosure is not built so as to render the structure in violation
- of the applicable non-elevation design requirements of this ordinance found at Section
 15.20.190(1).
- 141 (17) "Manufactured home" means a structure, transportable in one or more sections
- 142 which is built on a permanent chassis and is designed for use with or without a permanent
- 143 foundation when connected to the required utilities. For floodplain management purposes the
- 144 term "manufactured home" also includes park trailers, travel trailers, and other similar
- 145 vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the
- 146 term "manufactured home" does not include park trailers, travel trailers, and other similar
- 147 vehicles.

- 148 (18) "Manufactured home park or subdivision" means a parcel (or contiguous parcels)
- 149 of land divided into two or more manufactured home lots for rent or sale.
- 150 (19) "New construction" means structures for which the "start of construction"
- 151 commenced on or after the effective date of this ordinance.
- 152 (20) "Permanent foundation" means reinforced piers, columns, piles or pedestals that
- 153 may be made up of wood posts, reinforced concrete block or steel, and are capable of resisting 154 design loads.
- 155 (21) "Person" means an individual, partnership, corporation, association, organization,
- 156 cooperative, public or municipal corporation, or any agency of the state or local governmental
 157 unit however designated.
- 158 (22) "Ready for highway use" means that a recreational vehicle is on its wheels or
- 159 wheels and jacking system, is attached to the site only by quick disconnect type utilities and
- 160 security devices, is currently licensed and has no permanently attached additions.
- 161 (23) "Recreational vehicle" means a vehicular type unit primarily designed for
- 162 recreational camping, travel, or seasonal use which has its own motive power or is mounted
- 163 on or towed by another vehicle. The basic entities are: Travel trailer, folding camper trailer,
- 164 park trailer, truck camper, motor home, and multi use vehicles.
- 165 (24) "Residential structure" means all structures serving or designed as a dwelling
- 166 unit, residence or for occupation by residence.
- 167 (25) "Special flood hazard area" means an area subject to a base or one hundred year
- 168 flood; areas of special flood hazard are shown on a flood hazard boundary map or flood
- 169 insurance rate map as Zone A, AO, A1 30, AE, A99, AH, VO, V1 30, VE, or V.
- 170 (26) "Special flood risk zone" means an area within the 100 year floodplain from the
- 171 beginning to the end of Gages Slough which meets the following criteria:
- 172 (a) An area within 500 feet of the centerline of the slough having a ground elevation
- 173 which is three feet or more below the 100 year floodplain elevation.
- 174 (b) An area lying between the landward toe of the dikes and levees along the Skagit
- 175 River and a line 500 feet landward thereof. (Where dikes or levees do not exist, the ordinary
- 176 high water mark shall be utilized to measure the special flood risk zone.)
- 177 (27) "Start of construction" includes substantial improvement, and means the date the
- 178 building permit was issued, provided the actual start of construction, repair reconstruction,
- 179 placement or other improvement was within 180 days of the permit date. The actual start
- 180 means either the first placement of permanent construction of a structure on a site, such as the
- 181 pouring of slab or footings, the installation of piles, the construction of columns, or any work
- 182 beyond the stage of excavation; or the placement of a manufactured home on a foundation.
- 183 Permanent construction does not include land preparation, such as clearing, grading and
- 184 filling; nor does it include the installation of streets and/or walkways; nor does it include
- 185 excavation for a basement, footings, piers, or foundation or the erection of temporary forms;
- 186 nor does it include the installation on the property of accessory buildings, such as garages or
- 187 sheds not occupied as dwelling units or not part of the main structure.
- 188 (28) "Structure" means a walled and roofed building including a gas or liquid storage
- 189 tank that is principally above ground.
- 190 (29) "Substantial improvement" means:
- 191 (a) Any repair, reconstruction, or improvement of a structure, the cost of which equals or
- 192 exceeds fifty (50) percent of the market value of the structure either:
- 193 (i) Before the improvement or repair is started; or
- 194 (ii) If the structure has been damaged and is being restored, before the damage
- 195 occurred. For the purposes of this definition, substantial improvement is considered to occur
- 196 when the first alteration of any wall, ceiling, floor, or other structural part of the building

- 197 commences whether or not that alteration affects the external dimensions of the structure.
- 198 (b) The term does not, however, include either:
- 199 (i) Any project for improvement of a structure to comply with existing state or local
- 200 health, sanitary, or safety code specifications which are solely necessary to assure safe living 201 conditions; or
- 202 (ii) Any alteration of a structure listed on the National Register of Historic Places or
- 203 a State Inventory of Historic Places.
- 204 (30) "Variance" means a grant of relief from the requirements of this chapter which
- 205 permits construction in a manner that would otherwise be prohibited by this chapter.
- 206 (31) "Water dependent" means a water dependent structure for commerce or industry
- which cannot exist in any other location and is dependent on the water by reason of the
 intrinsic nature of its operations.
- 209 (32) "Wetlands" means lands transitional between terrestrial and aquatic systems
- 210 where the water table is usually at or near the surface or the land is covered by shallow water.
- 211 Wetlands have one or more of the following three attributes: (a) at least periodically, the land
- 212 supports predominately hydrophytes; (b) the substrate is predominately undrained hydric soil
- and (c) the substrate is nonsoils and is saturated with water or covered by shallow water at
- 214 some time during the growing season of each year. (Ord. 16311 (part), 1996: Ord. 11888
- 215 (part), 1988: Ord. 12216 (part), 1987)
- 216

217 **15.20.070 Basis for establishing areas of special flood hazard.**

- 218 The areas of Special Flood Hazard identified by the Federal Emergency Management Agency
- 219 in the scientific and technical engineering report entitled "Flood Insurance Study for the
- 220 Unincorporated Areas of Skagit County Washington," dated May 11, 1984, with
- 221 accompanying flood insurance rate and floodway maps and subsequent revisions, is hereby
- adopted by reference and declared to be a part of this chapter. The Board of County
- 223 Commissioners, shall obtain, review, and reasonably utilize more recent and accurate data
- supplied by Federal, State, or other sources for requiring that the provisions of Sections
- 15.20.190 and 15.20.195 be met. The Flood Insurance Study is on file with the Skagit County
- 226 Department of Planning and Community Development, County Administration Building,
- Mount Vernon, Washington 98273. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord.
 11216 (part), 1987)
- 229

230 15.20.080 Compliance.

231 No structure or land shall hereafter be constructed, located, extended, converted, or altered

- without full compliance with the terms of this chapter, R.C.W. Chapter 86.16 and W.A.C.
 173 158. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 233

235 15.20.090 Abrogation and greater restrictions.

- 236 This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants,
- or deed restrictions. However, where this chapter and another ordinance, easement, covenant,
 or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall
- 239 prevail. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 240

241 **15.20.100 Interpretation.**

- 242 In the interpretation and application of this chapter, all provisions shall be:
- 243 (1) Considered as minimum requirements;
- 244 (2) Liberally construed in favor of the governing body; and
- 245 (3) Deemed neither to limit nor repeal any other powers granted under state statutes. (Ord.

246 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)

248 15.20.110 Warning and disclaimer of liability.

249 The degree of flood protection required by this chapter is considered reasonable for

- 250 regulatory purposes and is based on scientific and engineering considerations. Larger floods
- 251 can and will occur on rare occasions. Flood heights may be increased by manmade or natural
- 252 causes. This chapter does not imply that land outside the areas of special flood hazards or uses
- 253 permitted within such areas will be free from flooding or flood damages. This chapter shall
- 254 not create liability on the part of Skagit County, any officer or employee thereof, or the
- 255 Federal Insurance Administration, for any flood damages that result from reliance on this
- 256 chapter or any administrative decision lawfully made thereunder. (Ord. 16311 (part), 1996:
- 257 Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 258

247

259 **15.20.120 Development permit**—Required—Application.

- 260 A development permit shall be obtained before construction or development begins within
- any area of special flood hazard established in Section 15.20.070. The permit shall be for all
- 262 structures including manufactured homes, as set forth in Section 15.20.050, and for all other
- 263 development including fill and other activities, also as set forth in Section 15.20.050.
- 264 Application for a development permit shall be made on forms furnished by the Director of
- 265 Planning and Community Development or his designee and may include, but not be limited
- 266 to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations
- 267 of the area in question; existing or proposed structures, fill, storage of materials, drainage
- facilities, and the location of the foregoing. Specifically, the following information is
 required:
- 270 (1) Elevation in relation to mean sea level, of the lowest habitable floor of all structures;
- 271 (2) Elevation in relation to mean sea level to which any structure has been floodproofed;
- 272 (3) Verification by a registered professional engineer or architect that the floodproofing
- 273 methods for any nonresidential structure meet the floodproofing criteria in subsection (2) of
- 274 Section 15.20.190;
- 275 (4) Description of the extent to which any watercourse will be altered or relocated as a result
 276 of proposed development. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216
- 277 (part), 1987)
- 278

279 15.20.130 Director of Planning and Community Development or designee

280 Administration.

- 281 The Director of Tanning and Community Development or his designee is hereby appointed to
- 282 administer and implement this chapter by granting or denying development permit
- 283 applications in accordance with its provisions.
- 284 (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 285

286 15.20.140 Director of Planning and Community Development — Duties.

- 287 (1) Duties of the Director of Planning and Community Development or his designee shall
 288 include, but not be limited to:
- 289 (a) Reviewing all development permits to determine that the permit requirements of this
- 290 chapter have been satisfied;
- 291 (b) Reviewing all development permits to determine that all necessary permits have been
- 292 obtained from those federal, state or local governmental agencies from which prior approval is
- 293 required;
- 294 (c) Reviewing all development permits to determine if the proposed development is

- 295 located in the floodway and if located in the floodway, assuring that the encroachment
- 296 provisions of subsection (1) of Section 15.20.200 are met.
- 297 (2) Use of Other Base Flood Data. When base flood elevation data has not been provided in
- 298 accordance with Section 15.20.070, the Director of Planning and Community Development or
- 299 his designee shall obtain, review, and reasonably utilize any base flood elevation data
- 300 available from a federal, state, or other source, in order to administer subsection (1) of Section
- 301 15.20.190, subsection (2) of Section 15.20.190, subsection (1) of Section 15.20.197, and
- 302 Section 15.20.200.
- 303 (3) Information to be Obtained and Maintained. The Director of Planning and Community
- 304 Development or his designee shall:
- 305 (a) Where base flood elevation data is provided through the Flood Insurance Study or
- 306 required as in Section 15.20.140(2), obtain and record the actual elevation (in relation to mean
- 307 sea level) of the lowest habitable floor (including basement) of all new or substantially
- 308 improved structures, and whether or not the structure contains a basement;
- 309 (b) For all new or substantially improved flood proofed structures:
- 310 (i) verify and record the actual elevation (in relation to mean sea level), and
- 311 (ii) Maintain the floodproofing certifications required in subsection (3) of Section
- 312 15.20.120,
- 313 (c) Maintain for public inspection all records pertaining to the provisions of this chapter;
- 314 (d) In coastal high hazard areas, certification shall be obtained from a registered
- 315 professional engineer or architect that the structure is securely anchored to adequately
- 316 anchored pilings or columns in order to withstand velocity waters.
- 317 (4) Alteration of Watercourses. The Director of Planning and Community Development or
 318 his designee shall:
- 319 (a) Notify adjacent communities and the Department of Ecology prior to any alteration
- 320 or relocation of a watercourse, and submit evidence of such notification to the Federal
- 321 Insurance Administration:
- 322 (b) Require that maintenance is provided within the altered or relocated portion of said
- 323 watercourse so that the flood carrying capacity is not diminished.
- 324 (5) Interpretation of FIRM Boundaries. The Director of Planning and Community
- 325 Development or his designee shall make interpretations where needed, as to exact location of
- 326 the boundaries of the areas of special flood hazards (for example, where there appears to be a
- 327 conflict between a mapped boundary and actual field conditions). The person contesting the
- 328 location of the boundary shall be given a reasonable opportunity to appeal the interpretation as
- 329 provided in Section 15.20.150. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 330 (part), 1987)
- 330 (part), 1987) 331

332 15.20.150 Appeals procedure.

- 333 (1) The Skagit County Hearing Examiner shall hear and decide appeals when it is alleged
- 334 that there is an error in any requirement, decision or determination made by the Director of
- Planning and Community Development or his designee in the enforcement or administration
 of the ordinance.
- 337 (2) Appeals shall be filed in writing in duplicate with the Skagit County Hearing Examiner
- 338 within twenty (20) days of the date of the action being appealed. An appeal must set forth
- 339 grounds demonstrating to the satisfaction of the Hearing Examiner that the appellant would be
- 340 adversely affected by the action taken.
- 341 (3) Upon the filing of an appeal, the Hearing Examiner shall set the time and place at which
- 342 the matter will be considered. At least a twelve (12) days notice of such time and place
- 343 together with one copy of the written appeal, shall be given to the official whose decision is

- 344 being appealed. At least twelve (12) days notice of the time and place shall also be given to
- 345 the adverse parties of record in the case. The official from whom the appeal is being taken
- 346 shall forthwith transmit to the Hearing Examiner, all of the records pertaining to the decision
- 347 being appealed, together with such additional written report as he deems pertinent.
- 348 (4) The Hearing Examiner may reverse or affirm wholly or in part, or may modify the order,
- 349 requirement, decision or determination as should be made, and to that end, shall have all the
- 350 powers of the administrative official from whom the appeal is taken, in so far as the decision
- 351 on the particular issue is concerned.
- 352 (5) Appeals of a decision made by the Hearing Examiner will be heard by the Board of
- 353 County Commissioners in accordance with Section 14.04.240 of the Skagit County Code.
- 354 Decisions by the Board of County Commissioners can be appealed to the Superior Court in
- 355 accordance with Section 14.04.210(6)(e) of the Skagit County Code. (Ord. 16311 (part), 1996:
- 356 Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 357

358 15.20.160 Variances.

- 359 Variances may be authorized in specific cases from the terms of this chapter as will not be
- 360 contrary to the public interest where, owing to special conditions, a literal enforcement of the
- 361 provisions of this chapter would result in unnecessary hardship. It shall be the duty of the
- 362 Hearing Examiner to hear and decide on all variance requests.
- 363 (1) A variance from the terms of this chapter shall not be considered unless and until a
- 364 written application for a variance is submitted to the county in an approved form and the
 365 appropriate fees are paid.
- 366 (2) The Hearing Examiner shall hold a public hearing on all variance requests. Notification
- 367 of such hearings shall follow the same procedure as outlined in Section 14.04.150(3)(d) of the
- 368 Skagit County Code.
- 369 (3) The burden of proof shall be on the applicant to bring forth evidence in support of the
- 370 application and to provide sufficient information on which any decision has to be made on the
- application. The applicant must demonstrate that the requested variance conforms to the
- 372 following standards:
- 373 (a) That special conditions and circumstances exist which are peculiar to the land,
- 374 structure, or building involved and which are not applicable to other lands, structures, or
- 375 buildings in the same special flood hazard area.
- 376 (b) That literal interpretation of the provisions of this chapter would deprive the
- 377 applicant of rights commonly enjoyed by other properties in the same flood hazard area under
- 378 the terms of this chapter.
- 379 (c) That the special conditions and circumstances do not result from the actions of the
 380 applicant.
- 381 (d) The granting of the variance requested will not confer on the applicant any special
- 382 privilege that is denied by this chapter to other lands, structures, or buildings in the same flood
 383 hazard area.
- 384 (4) The Hearing Examiner shall make the following findings in the granting of any variance:
- 385 (a) The reasons set forth in the application justify the granting of the variance, and that
- 386 the variance is the minimum variance that will make possib le the reasonable use of land,
- 387 building, or structure.
- 388 (b) The granting of the variance will be in harmony with the general purpose and intent
- of this chapter, and will not be injurious to the neighborhood, or otherwise detrimental to
 public welfare.
- 391 (c) Under no circumstances shall the Hearing Examiner grant a variance to allow a use

- 392 not permissible under the terms of this chapter or any use expressly or by implication
- 393 prohibited by the terms of this chapter, W.A.C. 173-158, R.C.W. 86-16 or 44 CFR Part 60 of
- 394 the National Flood Insurance Program.
- 395 (5) In granting any variance, the Hearing Examiner may prescribe such conditions and
- 396 safeguards as are necessary to secure adequate protection for the locality in which the use is to
- 397 be permitted. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988)
- 398

399 15.20.180 General standards.

- 400 In all areas of special flood hazards the following standards are required:
- 401 (1) Anchoring.
- 402 (a) All new construction and substantial improvements shall be anchored to prevent
- 403 flotation, collapse or lateral movement of the structure.
- 404 (b) All manufactured homes must likewise be anchored to prevent flotation, collapse or
- 405 lateral movement, and shall be installed using methods and practices that minimize flood
- 406 damage. Anchoring methods may include, but are not limited to, use of over the top or frame
- 407 ties to ground anchors.
- 408 (2) Recreational Vehicles.
- 409 (a) Recreational vehicles shall not be used as permanent dwelling units; and
- 410 (b) When located in Flood Hazard Areas designated as A, A1 10, A12, A14, A16, A18,
- 411 A21, V1, V4, AO, and AH the vehicle shall be ready for highway use.
- 412 (3) Construction Materials and Methods.
- 413 (a) All new construction and substantial improvements shall be constructed with
- 414 materials and utility equipment resistant to flood damage.
- 415 (b) All new construction and substantial improvements shall be constructed using
- 416 methods and practices that minimize flood damage.
- 417 (c) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other
- 418 service facilities shall be designed and/or otherwise elevated or located so as to prevent water
- 419 from entering or accumulating within the components during conditions of flooding.
- 420 (4) Utilities.
- 421 (a) All new and replacement water supply systems shall be designed to minimize or
- 422 eliminate infiltration of floodwaters into the system;
- 423 (b) New and replacement sanitary sewage systems shall be designed to minimize or
- 424 eliminate infiltration of floodwaters into the systems and discharge from the systems into
- 425 floodwaters;
- 426 (c) On site disposal systems shall be located to avoid impairment to them or
- 427 contamination from them during flooding.
- 428 (5) Subdivision Proposals.
- 429 (a) All subdivision proposals shall be consistent with the need to minimize flood
- 430 damage;
- 431 (b) All subdivision proposals shall have public utilities and facilities such as sewer, gas,
- 432 electrical, and water systems located and constructed to minimize flood damage;
- 433 (c) All subdivision proposals shall have adequate drainage provided to reduce exposure
- 434 to flood damage; and
- 435 (d) Where base flood elevation data has not been provided or is not available from
- 436 another authoritative source, it shall be generated for subdivision proposals and other
- 437 proposed developments which contain at least fifty (50) lots or five (5) acres (whichever is
 438 less).
- 439 (6) Review of Building Permits. Where flood elevation data is not available, applications for

- 440 building permits shall be reviewed to assure that proposed construction will be reasonably
- 441 safe from flooding. The test for reasonableness is a local judgment and includes use of
- 442 historical data, high water marks, photographs of past flooding, etc., where available. Failure
- 443 to elevate at least two feet above grade in these zones may result in higher insurance rates.
- 444 (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 445

446 15.20.190 Specific standards.

- 447 In all areas of special flood hazards where base flood elevation data has been provided as set
- forth in Section 15.20.070, or subsection (2) of Section 15.20.140, the following provisions
 are required:
- 450 (1) Residential Construction. New construction and substantial improvement of any
- 451 residential structure shall have the lowest floor, elevated one foot or more above the base
- 452 flood elevation. Fully enclosed areas below the lowest floor that are subject to flooding are
- 453 prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior
- 454 walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement
- 455 must either be certified by a registered professional engineer or architect or must meet or
- 456 exceed the following minimum criteria:
- 457 (a) A minimum of two openings having a total net area of not less than one square inch
- 458 for every square foot of enclosed area subject to flooding shall be provided.
- 459 (b) The bottom of all openings shall be no higher than one foot above grade.
- 460 (c) Openings may be equipped with screens, louvers/ or other coverings or devices
- 461 provided that they permit the automatic entry and exit of floodwaters.
- 462 (2) Nonresidential Construction. New construction and substantial improvements of any
- 463 commercial, industrial or other nonresidential structure shall either have the lowest floor
- 464 elevated one foot or more above the base flood elevation or together with attendant utility and
- 465 sanitary facilities, shall:
- 466 (a) Be floodproofed so that below one foot above the base flood elevation the structure is
- 467 watertight with walls substantially impermeable to the passage of water;
- 468 (b) Have structural components capable of resisting hydrostatic and hydrodymanic loads
 469 and effects of buoyancy;
- 470 (c) Be certified by a registered professional engineer or architect that the design and
- 471 methods of construction are in accordance with accepted standards of practice for meeting
- 472 provisions of this subsection based on their development and/or review of the structural
- 473 design, specifications and plans. Such certifications shall be provided to the official as set
- 474 forth in Section 15.20.140 (3)(b).
- 475 (d) Nonresidential structures that are elevated, not floodproofed, must meet the standards
- 476 for space below the lowest floor as set forth in Section 15.20.190(1).
- 477 (e) Applicants floodproofing nonresidential buildings shall be notified that flood
- 478 insurance premiums will be based on rates that are one foot below the floodproofed level (e.g.,
- 479 a building constructed to the base flood level will be rated as one foot below that level).
- 480 (3) All manufactured homes to be placed or substantially improved within Zones A1 30, AH,
- 481 and AE shall be elevated on a permanent foundation such that the lowest floor of the
- 482 manufactured home is one foot or more above the base flood elevation system in accordance
- 483 with the provisions of subsection 15.20.180(1)b.
- 484 (4) Critical facilities should be afforded additional flood protection due to their nature.
- 485 Communities therefore shall impose minimum standards which are in addition to those used
- 486 for other types of development. Construction of new critical facilities shall be to the extent
- 487 possible, located outside the limits of the one hundred year floodplain as identified on the
- 488 community's FIRM. Construction of new critical facilities shall be permissible within the one

- 489 hundred year frequency floodplain if no feasible alternative site is available. Critical facilities
- 490 constructed within the one hundred year frequency floodplain shall have the lowest floor
- 491 elevated to three or more feet above the level of the one hundred year frequency flood.
- 492 Floodproofing and sealing measures shall be taken to ensure that toxic substances will not be
- 493 displaced by or released into floodwaters. Access routes elevated to or above the level of the
- 494 one hundred year frequency flood shall be provided to all critical facilities to the extent
- 495 possible. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 496

497 **15.20.195 Specific standards for AO zone s or areas of shallow flooding.**

- 498 Shallow Flooding Zones (AO Zones) appear on the Flood Insurance Rate Maps with depth
- designations from one to three feet and in some areas with water velocities indicated. In these
 areas, the following provisions apply:
- 501 (1) New construction and substantial improvements of residential structures within AO
- 502 Zones shall have the lowest floor (including basement) elevated above the highest adjacent
- 503 grade of the building site, one foot or more above the depth number specified on the Flood
- 504 Insurance Rate Map (FIRM), Where appropriate, such structures shall be elevated above the
- 505 crown of the nearest road, one foot or more above the depth number specified on the FIRM.
- 506 Where velocities of five feet per second or greater are listed in an AO Zone, new structures
- 507 within 200 feet of the toe of any dike shall be constructed to the following standards in
 508 addition to those listed above:
- 509 (a) All buildings or structures shall be elevated so that the lowest supporting member is
- 510 located no lower than one foot or more above the base flood elevation level, with all space
- 511 below the lowest supporting member open so as not to impede the flow of water except for
- 512 breakaway walls provided for in subsection (f) of this section.
- 513 (b) All buildings or structures shall be securely anchored on pilings or columns.
- 514 (c) Pilings or columns used as structural support shall be designed and anchored so as to
- 515 withstand all applied loads of the base flood flow.
- 516 (d) Compliance with provisions of (a), (b), and (c) of this section shall be certified by a
- 517 registered professional engineer or architect.
- 518 (e) There shall be no fill used for structural support.
- 519 (f) Breakaway walls shall be allowed below the base flood elevation; provided, they are
- 520 not a part of the structural support of the building and are designed so as to break away under
- abnormally high water velocities without damage to the structural integrity of the building on
 which they are to be used.
- 523 (g) If breakaway walls are utilized, such enclosed space shall not be used for human
- 524 habitation.
- 525 (2) New construction and substantial improvements of nonresidential (commercial and
- 526 industrial) structures within AO Zones shall either:
- 527 (a) Have the lowest floor (including basement) elevated above the highest adjacent grade
- 528 of the building site, one foot or more above the depth number specified on the FIRM. Where
- appropriate, such structures shall be elevated above the crown on the nearest road, one foot or
 more above the depth number specified on the FIRM; or
- 531 (b) Together with attendant utility and sanitary facilities be completely floodproofed one
- 532 foot or more above the base flood elevation so that any space below that level is watertight
- 533 with walls substantially impermeable to the passage of water and with structural components
- 534 having the capability of resisting hydrostatic and hydrodynamic loads and effects of
- 535 buoyancy. If this method is used, compliance shall be certified by a registered professional
- 536 engineer or architect; or,
- 537 (c) If located in an AO Zone with water velocities of five feet per second or greater and

- 538 within 200 feet of the toe of a dike shall be constructed to the standards of subsections 1(a)
- 539 through 1(g) above.
- 540 (3) Require adequate drainage paths around structures on slopes to guide floodwaters around
- 541 and away form proposed structures. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord.
- 542 11216 (part), 1987)
- 543

544 **15.20.197 Specific standards for construction in special flood risk zones.**

- 545 The following construction standards are required in special flood risk zones as defined in
- 546 Section 15.20.050:
- 547 (1) New construction and substantial improvements of residential and nonresidential
- 548 structures within special flood risk zones shall have the lowest supporting member elevated
- 549 one foot or more above the base flood elevation and shall be constructed according to the
- 550 standards provided in subsections 15.20.195(1)(a) through (g).
- 551 (2) Regardless of method of construction, critical facilities are prohibited in the special flood
 552 risk zones
- 553 (3) There shall be no fill or new construction within the channel of Gages Slough. (Ord.
- 554 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 555

556 **15.20.200 Floodways.**

- 557 Located within areas of special flood hazard established in Section 15.20.070 are areas
- 558 designated as floodways. Since the floodway is an extremely hazardous area due to the
- 559 velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the 560 following provisions apply:
- 561 (1) Prohibit encroachments, including fill, new construction, substantial improvements, and
- 562 other development unless certification by a registered professional engineer or architect is
- 563 provided demonstrating that encroachments shall not result in any increase in flood levels
- 564 during the occurrence of the base flood discharge.
- 565 (2) Prohibit construction or reconstruction of residential structures except for:
- 566 (a) Repairs, reconstruction, or improvements to a structure which do not increase the
- 567 ground floor area; and
- 568 (b) Repairs, reconstruction, or improvements to a structure the cost of which does not
- 569 exceed fifty percent of the market value of the structure either (i) before the repair,
- 570 reconstruction, or improvement is started, or (ii) if the structure has been damaged, and is
- 571 being restored, before the damage occurred. Work done on structures to comply with existing
- 572 health, sanitary, or safety codes or to structures identified as historic places shall not be
- 573 included in the fifty percent determination.
- 574 (3) If subsections (1) and (2) of this section are satisfied, all new construction and substantial
- 575 improvements shall comply with all applicable flood hazard reduction provisions of Sections
- 576 <u>15.20.180 through 15.20.210.</u>
- 577 (4) Building and development near streams without a designated floodway shall comply with
- 578 the requirements of 44 CFR 60.3(b)(3) and (4) and (c)(10) of the National Flood Insurance
- 579 Program regulations. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part),
 580 1987)
- 581

582 15.20.205 Encroachment standards.

- 583 No new construction, substantial improvements, or other development (including fill) shall be
- 584 permitted within Zones A1 30 on the community's FIRM, unless it is demonstrated that the
- 585 cumulative effect of the proposed development, when combined with all other existing and
- 586 anticipated development, will not increase the water surface elevation of the base flood more

- 587 than one foot at any point within the community. (Ord. 16311 (part), 1996: Ord. 11888 (part), 588 1988: Ord. 11216 (part), 1987)
- 589

590 15.20.210 Coastal high hazard area.

- 591 Coastal high hazard areas (V zones) are located within the areas of special flood hazard
- 592 established in Section 15.20.070. These areas have special flood hazards associated with high
- 593 velocity waters from tidal surges and, therefore, the following provisions shall apply:
- 594 (1) All new construction and substantial improvements in Zones V1 V30 shall be elevated on
- 595 pilings and columns so that:
- 596 (a) The bottom of the lowest horizontal structural member of the lowest floor (excluding
- 597 the pilings or columns) is elevated one foot or more above the base flood level; and
- 598 (b) The pile or column foundation and structure attached thereto is anchored to resist
- 599 flotation, collapse and lateral movement due to the effects of wind and water loads acting
- 600 simultaneously on all building components. Wind and water loading values shall each have a
- 601 one percent chance of being equaled or exceeded in any given year (100 year mean recurrence 602 interval);
- 603 A registered professional engineer or architect shall develop or review the structural design,
- 604 specifications and plans for the construction and shall certify that the design and methods of
- 605 construction to be used are in accordance with accepted standards of practice for meeting the 606 provisions of (a) and (b) of this Section.
- 607
- (2) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural
- 608 member of the lowest floor (excluding pilings and columns) of all new and substantially
- 609 improved structures in Zones V1 V30 and whether or not such structures contain a basement.
- 610 The local administrator shall maintain a record of all such information.
- 611 (3) All new construction shall be located landward of the rear of mean high tide.
- 612 (4) Provide that all new construction and substantial improvements have the space below the
- 613 lowest floor either free of obstruction or constructed with nonsupporting breakaway walls,
- 614 open wood lattice work, or insect screening intended to collapse under wind and water loads
- 615 without causing collapse, displacement, or other structural damage to the elevated portion of
- 616 the building or supporting foundation system. For the purpose of this section, a breakaway
- 617 wall shall have a design safe loading resistance of not less than 10 and no more than 20
- 618 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance
- 619 of 20 pounds per square foot (either by design or when so required by local or State codes)
- 620 may be permitted only if a registered professional engineer or architect certifies that the
- 621 designs proposed meet the following conditions:
- 622 (a) Breakaway wall collapse shall result from a water load less than that which would
- 623 occur during the base flood; and
- 624 (b) The elevated portion of the building and supporting foundation system shall not be
- 625 subject to collapse, displacement, or other structural damage due to the effects of wind and
- 626 water loads acting simultaneously on all building components (structural and nonstructural).
- 627 Maximum wind and water loading values to be used in this determination shall each have a
- 628 one percent chance of being equaled or exceeded in any given year (100 year mean recurrence 629 interval).
- 630 (5) If breakaway walls are utilized, such enclosed space shall be usable solely for parking of
- 631 vehicles, building access, or storage. Such space shall not be used for human habitation.
- 632 (6) Prohibit the use of fill for structural support of the building.
- 633 (7) Prohibit man made alteration of sand dunes which would increase potential flood
- 634 damage. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988: Ord. 11216 (part), 1987)
- 635

636 15.20.220 Wetlands management.

- 637 Wetlands are areas of great natural productivity and hydrological utility, providing natural
- 638 flood control, flood desynchronization, and flow stabilization of rivers and streams. The
- 639 unrestricted use and development of wetlands will destroy many of these beneficial qualities
- 640 which directly affect human health and safety during flood events. The piecemeal alteration
- 641 and destruction of wetlands through draining, dredging, filling, and other means has an
- 642 adverse cumulative impact on their ability to reduce flood damage.
- 643 The County should to the maximum extent possible, seek to avoid the long and short term
- 644 adverse impacts associated with the destruction or modification of wetlands, especially those
- 645 activities which limit or disrupt the ability of the wetland to ameliorate flooding impacts.
- 646 Proposals for development within special flood hazard areas shall not impact wetlands and
- 647 these activities in or around wetlands shall not negatively affect public safety, health, and
- 648 welfare by disrupting the wetlands ability to reduce flood and storm hazards. (Ord. 16311
- 649 (part), 1996: Ord. 11888 (part), 1988)
- 650

651 15.20.230 Penalties and enforcement.

- 652 (1) The Attorney General or the Skagit County Prosecuting Attorney shall bring such
- 653 injunctive, declaratory, or other actions as are necessary to ensure compliance with this
- 654 chapter and W.A.C. 173–158.
- 655 (2) Any person who fails to comply with this chapter and W.A.C. 173 158 shall also be

subject to a civil penalty not to exceed one thousand dollars for each violation. Each violation
 or each day of noncompliance shall constitute a separate violation.

- 658 (3) The penalty provided for in this section shall be imposed by a notice in writing, either by
- 659 certified mail with return receipt requested or by personal service, to the person incurring the
- 660 same from the Department of Ecology or the County, describing the violation with reasonable
- 661 particularity and ordering the act or acts constituting the violation or violations to cease and
- 662 desist or, in appropriate cases, requiring necessary corrective action to be taken within a
- 663 specific and reasonable time.
- 664 (4) Any penalty imposed pursuant to this section by the Department of Ecology shall be
- 665 subject to review by the Pollution Control Hearings Board. Any penalty imposed pursuant to
- 666 this section by the County shall be subject to review by the Skagit County Hearing Examiner
- 667 in accordance with Section 15.20.150 of the Skagit County Code. Any penalty jointly
- 668 imposed by the Department of Ecology and the County shall be appealed to the Pollution
- 669 Control Hearings Board. (Ord. 16311 (part), 1996: Ord. 11888 (part), 1988