NONCODE ORDINANCE

Sponsored by: Borough Mayor
Introduced: 08/01/23
Public Hearing: 08/15/23
Amended: 08/15/23
Adopted: 08/15/23

MATANUSKA-SUSITNA BOROUGH
ORDINANCE SERIAL NO. 23-079

AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY ESTABLISHING AN ADVISORY BOARD TO REVIEW AND MAKE RECOMMENDATIONS TO THE ASSEMBLY REGARDING WATER BODY SETBACKS.

WHEREAS, the intent and rationale for this ordinance are found in the accompanying Information Memorandum No. 23-175.

BE IT ENACTED:

Section 1. Classification. This is a noncode ordinance.

Section 2. Creation of Advisory Body. An advisory body, to be called the Waterbody Setback Advisory Board, is hereby established. The Borough planning department will staff the Waterbody Setback Advisory Board. The applicable provisions of MSB 4.05 apply to the Waterbody Setback Advisory Board. The Board will follow Robert's Rules of Order except that whenever the rules refer to a vote of a majority or other designated portion of the Board, the vote required shall be the designated portion of the nine members authorized to serve on the Board.

Section 3. Membership. There will be nine (9) members of the Waterbody Setback Advisory Board. As feasible, membership will be from the following groups:

1 member from the MSB Planning Commission;

1 member from the MSB Fish and Wildlife Commission;

1 member from MatSu Salmon Habitat Partnership;

1 member with experience in designing and constructing stormwater abatement best management practices;

1 member from the home builder, lending, or real estate community;

1 member from the Alaska State Department of Environmental Conservation; and

3 members at large.

Nothing in this ordinance obligates the Mayor to make specific appointments nor the Assembly to confirm specific appointments. The determination of feasibility of membership will be made only by the Mayor in making appointments, and only by the Assembly in confirming or declining appointments. The Mayor may make appointments at any time, but should seek to complete appointments so that the Assembly may confirm them no later than September 2023.

Section 4. Announcement and application for appointments. Borough Administration is directed to publicize the creation of the Board and provide information on how to apply. Applications for consideration must be received no later than by September 1, 2023.

Section 5. Scope of Duties. The Waterbody Setback Advisory Board is empowered to review and recommend any changes to Borough code relating to waterbody setbacks and related issues. These related issues should include variances/non-conformities, how to deal with structures built in violation of the 1973 and 1987 ordinances, possible remedies for structures in violation, and any other issues the Board believes are pertinent. To the extent possible, the Advisory Board shall identify possible solutions, identify ways to enforce and implement those solutions, and identify resources needed to implement and enforce those solutions.

Section 6. Report. The Waterbody Setback Advisory Board will prepare a written report and the Chair will present the report to the Borough Assembly no later than September 17, 2024.

Section 7. Effective date and termination. This ordinance shall take effect upon adoption. This ordinance, and the Waterbody Setback Advisory Board, will expire on September 18, 2024.

ADOPTED by the Matanuska-Susitna Borough Assembly this 15 day of August, 2023.

EDNA DeVRIES, Borough Mayor

ATTEST:

LONNIE R. McKECHNIE, CMC, Borough Clerk

(SEAL)

PASSED UNANIMOUSLY: Hale, Nowers, McKee, Yundt, Tew, Fonov, and Bernier

HISTORY OF SETBACK REGULATIONS
WITHIN THE MATANUSKA-SUSITNA BOROUGH

Ordinance 73-6 adopted July 3, 1973:

Sec. 08.45.110(e)(2) – Structural Setback – No structure shall be placed nearer than twenty-five (25) feet from the right of way line of any public right of way. This setback shall be known as the building line. See Sec. 08.45.112(b) for setbacks from bodies of water. Statement shall be affixed to the plat or included in the covenants.

Sec. 08.45.110(e)(3) – Side Yard – No structure shall be placed nearer than ten (10) feet from any side lot line. (This subsection to be deleted upon adoption of like provisions in Zoning Ordinance.) Statement shall be affixed to the plat or included in the covenants.

Sec. 08.45.112(b) – Shorelands – Structural Setback – Structures shall not be closer than 75 feet from the normal high water mark of a water course or body of water in a shoreland. The Commission may require a greater setback if it finds that a specific body of water possesses unique characteristics such as outstanding fish and aquatic life, shore cover, natural beauty, or other ecological attribute.

Sec. 08.45.112(f) – Boat houses may be located over the water provided they are not used for habitation and do not contain sanitary facilities.

Ordinance 74-12 adopted July 16, 1974:

Sec. 08.45.112(b) – Structural Setback – Added the following statement: A statement to this effect shall be affixed to the plat or included in the covenants.

Sec. 08.45.112(f) – Amended to read: Docks, piers, marinas and boat houses may be located over the water provided they are not used for habitation and do not contain sanitary facilities.

Ordinance 77-40 adopted September 6, 1977:

16.44.060(B) – Structural Setback. No structure on a lot created by the act of subdivision after July 16, 1974 shall be placed nearer than twenty-five feet from the right-of-way line of any public right-of-way. This setback shall be known as the building line. See Section 16.52.020 for setbacks from bodies of water. A statement to this effect shall be affixed to the plat or included in the covenants.

16.44.060(C) – Side Yard. No structure on a lot created by the act of subdivision after July 16, 1974 shall be placed nearer than ten feet from any side lot line. A statement to this effect shall be affixed to the plat or included in the covenants.

Ordinance 78-22 adopted June 6, 2978

16.44.060(B) – Structural Setback. No structure on a lot created by the act of subdivision after July 3, 1973 shall be placed nearer than twenty-five feet from the right-of-way line on any public right-of-way. This setback shall be known as the building line. See Section 16.52.020 for setbacks from bodies of water. A Statement to this effect shall be affixed to the plat or included in the covenants.

16.44.060(C) – Side Yard. No structure on a lot created by the act of subdivision after July 3, 1973 shall be placed nearer than ten feet from any side lot line. A statement to this effect shall be affixed to the plat or included in the covenants.

Ordinance 81—68 adopted June 18, 1981 [effective July 1, 1981]:

16.25.340(A) – No structure footing shall be placed within twenty-five feet from the right-of-way line of any public right-of-way. This setback shall be known as the building line setback. Section 16.25.480 shall govern building line setbacks along bodies of water.

16.25.340(B) – No structure footing shall be located nearer than ten feet from any side or rear lot line.

16.25.340(D) – The requirements of this section, except for the side yard requirements of subsection B shall apply to lots intended for commercial or industrial use.

16.25.480(A) – Except as provided in B and C of this section, no structure or footing shall be located closer than 75 feet from the high water mark of a watercourse or body of water.

16.25.480(B) – Docks, piers, marinas, and boathouses may be located over the water provided they are not used for habitation and do not contain sanitary facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations.

16.25.480(C) – The platting authority shall require setbacks greater than 75 feet if it finds that the body of water involved has unique characteristics such as unusual fish and aquatic life, shore cover, natural beauty or other ecological characteristics and the preservation or enhancement of such warrant additional setbacks.

Ordinance 82-74 adopted December 21, 2982:

16.25.340(A) – No building line shall be placed within twenty-five feet from the right-of-way line of any public right-of-way. This setback shall be known as the building line setback. Section 16.25.480 shall govern building line setbacks along bodies of water.

16.25.340(B) – Except for lots intended for commercial or industrial use, no structure footing shall be located nearer than ten feet from any side or rear lot line.

16.25.340(D) – This section shall not apply to any subdivision or portion thereof which is regulated by other setback requirements in Title 17 of Borough Code.

Ordinance 83-40 adopted May 11, 1983:

16.25.340(B) – Except for lots intended for commercial or industrial use, no furthermost protruding portion of any structure excluding eaves shall be located nearer than ten feet from any side or rear lot line.

HISTORY OF SETBACK REGULATIONS
WITHIN THE MATANUSKA-SUSITNA BOROUGH

Ordinance 83-59 adopted September 6, 1983:

16.25.340(A) – No furthermost protruding portion of any structure shall be placed within twenty-five feet from the right-of-way line of any public right-of-way, except no furthermost protruding portion of any structure shall be placed within ten feet from the right-of-way when the pre-existing lot:

1. Measures sixty feet or less in frontage on a public right-of-way and is not located on a cul-de-sac bulb, or
2. Comprises a non-conforming structure erected prior to July 3, 1973.

This setback shall be known as the building line setback. Section 16.25.480 shall govern building line setbacks along bodies of water.

16.25.340(B) – Except where specifically provided otherwise by ordinance, no furthermost protruding portion of any structure excluding eaves shall be located nearer than ten feet from any side or rear lot line. Eaves shall not protrude no more than three feet into the required setback.

Ordinance 84-34 adopted June 12, 1984:

16.25.480(B) – Docks, piers, marinas, and boathouses may be located closer than seventy-five feet and over the water provided they are not used for habitation and do not contain sanitary facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations. Water wells may be located no closer than ten feet from the high water mark.

Ordinance 86-23 am adopted April 15, 1986:

16.25.340(D) – The setback requirements of this section do not apply to property within the cities of Palmer and Wasilla. The screening easement requirements of subsection C do not apply within the City of Wasilla.

Ordinance 86-85 adopted October 7, 1986:

16.25.480(C) – This section does not apply to structures where construction was completed prior to January 1, 1986 if the present owner or owners of the property had no personal knowledge of any violation of the requirements of this section prior to substantial completion of the structure. The Director of Development Services or the designee of the director shall, upon application by a property owner, determine whether a property qualifies for an exception under this subsection.

Ordinance 86-101 adopted November 4, 1986:

16.25.480(A) – Except as provided in subsection B of this section, no structure or footing shall be located closer than forty-five feet from the high water mark of a watercourse or body of water.

16.25.480(B) – Docks, piers, marinas, and boathouses may be located closer than forty-five feet and over the water provided they are not used for habitation and do not contain sanitary facilities. Structures permitted over water under this subdivision shall conform to all applicable state and federal statutes and regulations. Water wells may be located no closer than ten feet from the high water mark.

Ordinance 87-024 adopted March 17, 1987:

16.25.480(C) – Subsection A of this section does not apply to structures where construction was completed prior to January 1, 1987 if the present owner or owners of the property had no personal knowledge of any violation of the requirements of this section prior to substantial completion of the structure. The Director of Development Services or the designee of the director shall, upon application by a property owner, determine whether a property qualifies for an exception under this section.

75 Foot Setback Reinstated May 12, 1987 (Election held May 5, 1987, certified by Assembly May 12, 1987)

Ordinance 87-59 adopted May 19, 1987:

16.25.480(B) – Docks, piers, marinas, aircraft hangers, and boat houses may be located closer than seventy-five feet and over the water provided they are not used for habitation and do not contain sanitary or petroleum fuel storage facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations. Water wells may be located no closer than ten feet from the high water mark.

Ordinance 88-094 adopted July 19, 1988:

16.25.340(E) – If a condemnation by a governmental agency reduces the building line setback of a structure below twenty-five feet but there remains at least ten feet setback and the setback reduced by the condemnation met the requirements of this section prior to the condemnation, the resulting setback shall be the setback requirement for the lot.

Ordinance 88-190 am adopted September 6, 1988:

17.55.010(A) – No building line shall be placed within twenty-five feet from the right-of-way of any public right-of-way, except no further most protruding portion of any structure shall be placed within ten feet from the right-of-way when the pre-existing lot:

1. Measures sixty feet or less in frontage on a public right-of-way and is not located on a cul-de-sac bulb; or

2. Comprises a nonconforming structure erected prior to July 3, 1973.

This setback shall be known as the building line setback. Section 17.55 shall govern building line setbacks along bodies of water.

17.55.010(B) – Except where specifically provided otherwise by ordinance, no furthermost protruding portion of any structure excluding eaves shall be located nearer than ten feet from any side or rear lot line. Eaves shall not protrude more than three feet into the required setback.

17.55.010(D) – The setback requirements of this section do not apply to property within the cities of Palmer and Wasilla. The screening easement requirements of subsection C do not apply within the City of Wasilla.

17.55.010(E) – If a condemnation by a governmental agency reduces the building line setback of a structure below twenty-five feet but there remains at least ten feet setback and the setback reduced by the condemnation met the requirements of this section prior to the condemnation, the resulting setback shall be the setback requirement for that lot.

17.55.020(A) – Except as provided in subsection B of this section, no structure or footing shall be located closer than seventy-five feet from the highwater mark of a watercourse or body of water.

17.55.020(B) – Docks, piers, marinas, aircraft hangers, and boathouses may be located closer than seventy-five feet and over the water provided they are not used for habitation and do not contain sanitary or petroleum fuel storage facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations.

17.55.020(C) – This section does not apply to structures where construction was completed prior to January 1, 1987 if the present owner or owners of the property had no personal knowledge of any violation of the requirements of this section prior to substantial completion of the structures. The Director of the Planning Department or the designee of the director shall upon application by the property owner, determine whether a property qualifies for an exception under this subsection.

17.55.020(D) – In this section, a "structure" is any dwelling or habitable building or garage.

<u>Ordinance 89-072 adopted May 16, 1989:</u>

17.55.025(L) – Structure – anything that is constructed or erected and located on or under the ground, or attached to something fixed to the ground. For purposes of minimum setbacks and building separation requirements the following are not considered structures unless specifically addressed by code: fences; retaining walls; parking areas; roads, driveways, or walkways; window awnings; a temporary building when used for 30 days or less; utility poles and lines; guy wires; closed lines; flag poles; planter; incidental yard furnishings; water wells; monitoring wells and/or tubes; patios, decks, or steps less than 18 inches above average grade.

<u>Ordinance 93-042 adopted May 4, 1993:</u>

17.55.010(A) – Structure – No structure or building line shall be placed within 25 feet from the right-of-way line of any public right-of-way, except no furthermost protruding portion of any structure shall be placed within ten feet from the right-of-way line of any public right-of-way when the pre-existing lot:

17.55.010(A)(1) – Measures 60 feet or less in frontage on a public right-of-way and is not located on a cul-de-sac bulb; or

17.55.010(A)(2) – Comprises a nonconforming structure erected prior to July 3, 1973. This setback shall be known as the structure or building line setback.

17.55.010(B) – Except where specifically provided otherwise by ordinance, no furthermost protruding portion of any structure or building line, shall be located nearer than ten feet from any side or rear lot line.

17.55.010(C) – Except as otherwise specified by code, eaves may project a maximum of three feet into required setback areas.

17.55.010(D) – The setback requirements of this section do not apply to property within the cities of Palmer and Wasilla.

17.55.010(E) – If a condemnation by a governmental agency reduces the building line setback of a structure below 25 feet but there remains at least ten feet setback and the setback reduced by the condemnation met the requirements of this section prior to the condemnation, the resulting setback shall be the setback requirement for the lot.

17.55.015 Shorelands – Definition – "Shorelands" means that upland within 300 feet of any lake, pond, or watercourse, and within 300 feet from any river or stream, or to the landward side of the floodplain, if that distance is greater.

17.55.020 – Setbacks for shorelands.

17.55.020(A) – Except as provided in subsection B of this section, no structure or footing shall be located closer than 75 feet from the high water mark of a watercourse or body of water. Except as provided otherwise, eaves may project three feet into the required setback area.

17.55.020(B) – Docks, piers, marinas, aircraft hangars and boathouses may be located closer than 75 feet and over the water, provided they are not used to habitation and do not contain sanitary or petroleum fuel storage facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations.

17.55.020(C) – In the city of Wasilla, this section does not apply to structures where construction was completed prior to November 16, 1982. Elsewhere in the borough, this section does not apply to structures where construction was completed prior to January 1, 1987. If the present owner or owners of the property had no personal knowledge of any violation of the requirements of this section prior to substantial completion of the structures, the director of the planning department or the designee of the director shall, upon application by a property owner, determine whether a property qualifies for an exception under this subsection.

17.55.020(D) – In this subsection, a "structure" is any dwelling or habitable building or garage.

17.55.020(E) – No part of a subsurface sewage disposal system shall be closer than 100 feet from any body of water or water course. The planning commission shall require this distance be increased where necessary to protect waters within the borough.

Ordinance 93-136 adopted December 7, 1993:

17.01.010 – Intent and applicability.

17.01.010(A) – It is the intent of this chapter to improve the level of compliance with existing borough code by directly providing regulatory information to persons proposing development. This chapter addresses development not otherwise addressed within this title.

17.01.010(B) – There may be federal, state, and local requirements governing land use. It is the responsibility of the individual land owner to obtain a determination whether such requirements apply to the development of their land. All land within the boundaries of the Matanuska-Susitna Borough is subject to land use and development regulations. It is not the intent of this chapter to replace or supersede regulations of other chapters within this title. Additional information and permits, such as flood damage prevention, mobile home park ordinance, conditional uses, regulation of alcoholic beverages, may be required in accordance with borough code.

17.01.020 – State of Acknowledgement of Existing Land Use Regulations – The land owner or authorized agent should obtain an acknowledgment of existing land use regulations form prior to the commencement of construction, reconstruction, installation, expansion, or addition of a structure or building, including the excavation or fill of more than ten cubic yards of material for such purposes, or any excavation in a flood hazard area. The acknowledgment form shall be signed by the applicant at the borough planning department.

17.01.030(A) – Procedure – The signed acknowledgment of existing regulations form shall be submitted to the planning director or his designee, on a form provided by the planning department. A nonrefundable charge as established by the assembly, payable to the borough, shall be submitted with the form. A copy of the acknowledgment shall be retained in the planning department files.

17.01.030(B) – A packet of development information, such as minimum lot line setbacks, applicable land use districts, flood hazard zones, etc. shall be provided, upon request, to the applicant, (developer, property owner or authorized agent) to assist in improving the level of compliance with existing borough code.

17.57.010(A) – Intent – Except as otherwise provided by code, it is the intent of this chapter to permit pre-existing nonconforming structures to remain until they are removed or abandoned but not to encourage their perpetuation. It is not intended that this chapter replace or supersede nonconformity regulations in other chapters within this title.

17.57.010(B) – Nothing in this chapter shall be deemed to require a change in the plans or construction of any building actually under construction or development prior to the effective date of adoption of this ordinance as long as the building was allowable under the code in effect at the

start of development. Development is defined as any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations. Where excavation, demolition or removal of an existing building has begun in preparation of rebuilding, such excavation, demolition, or removal shall be deemed to be actual construction or development, provided that continuous progress is being made toward completion.

17.57.010(C) – Structures which are in trespass are not eligible for recognition as a pre-existing legal nonconforming structure.

17.57.010(D) – This chapter does not apply to structures located in a federally-designated flood hazard area.

17.57.010(E) – A nonconforming structure shall not have legal pre-existing nonconforming status for purposes of this chapter unless a written determination of legal nonconforming status has been issued by the Borough.

17.57.020 – Nonconforming Lots of Record – Permitted structures and accessory buildings may be erected on nonconforming lots of record as long as they meet all applicable codes. This provision shall apply even though the lot fails to meet the requirements for area, or width, or both, currently applicable.

17.57.030 – Nonconforming Structures – Where a structure existed that could not be built under the terms of the current regulations, or made nonconforming by subsequent regulations, such structure may continue to exist as long as it remains lawful subject to the following provisions:

17.57030(A) – A nonconforming structure may not be enlarged or altered in any way which would increase the nonconformity. Any nonconforming structure or portion of a nonconforming structure may be altered to decrease its nonconformity.

17.57.030(B) – A nonconforming structure may be enlarged as long as the addition conforms to code.

17.57.030(C) – The physical location of a nonconforming structure may be changed only to reduce or eliminate the nonconformity.

17.57.030(D) – An existing structure devoted to a use not permitted by code shall not be enlarged, extended, moved, or structurally altered.

17.57.040 – Request for a determination of pre-existing nonconforming status.

17.57.040(A) – An application for a determination of legal pre-existing nonconforming status may be initiated by the property owner or his authorized agent. The application shall be filed with the planning director on a form provided by the planning department. The application shall be accompanied by a nonrefundable application fee, established by the assembly, and made payable to the Matanuska-Susitna Borough. The planning director or his designee may grant legal pre-

existing nonconforming status only when evidence can be provided that an acknowledgement of existing regulations was not required at the time the structure was erected except as noted herein.

17.57.040(B) – Structures which were constructed lawfully after the date of adoption of the ordinance, requiring acknowledgement of existing regulations but which were made unlawful after the date of start of construction due to adoption of subsequent regulations shall be eligible for legal nonconforming status.

17.57.040(C) – In addition to the complete application form, the submittal shall contain the following items:

17.57.040(C)(1) – Description and photographs of the structure.

17.57.040(C)(2) – As-built drawing(s), prepared by a professional surveyor, registered in the state of Alaska, verifying the location(s) or the structure(s).

17.57.050 – Repairs and Maintenance – Except as otherwise addressed by code, nothing in this ordinance shall prevent keeping in good repair, a nonconforming building or a building in which a nonconforming use is conducted. However, no building that is declared by an authorized official to be unsafe or unlawful by reason of physical condition shall be restored, repaired, or rebuilt except in conformity with this chapter.

17.57.060 – Restoration of damaged property.

17.57.060(A) – Except as otherwise addressed by code, nothing in this ordinance shall prevent restoration and subsequent continued occupancy and use of a building destroyed to up to 50 percent of its replacement value by fire, explosion, or other casualty or act of God.

17.57.060(B) – A dwelling made nonconforming through adoption or amendments to title 17 zoning may be replaced or reconstructed within two years after damage or destruction by fire, explosion, or other casualty or act of God. Replacement or reconstruction may be undertaken in the same space that it occupied prior to damage or destruction even though the damage or destruction exceed 50 percent of its replacement value provided it was a legal structure at the date of construction. The percentage of loss shall be determined by an independent adjustor or appraiser who is FIRREA certified or the appraisal must be accompanied by the appraiser's license number and certification of type of appraisal they are licensed to perform.

17.57.070 – Termination of nonconformities – When a pre-existing legal nonconforming structure is abandoned for a period of one year or more, the building shall not then be used except in compliance with this chapter. It is not the intent of this section to prohibit reconstruction of a damaged nonconforming structure if the reconstruction was prohibited due to lawful orders issued in the course of an arson or criminal investigation.

17.57.080 – Violations and enforcement – Violations and enforcement of this chapter shall be consistent with the terms and provisions of MSB 17.56.

HISTORY OF SETBACK REGULATIONS
WITHIN THE MATANUSKA-SUSITNA BOROUGH

Ordinance 01-016 adopted March 6, 2001:

17.80.060(A) – Where a permanent structure exists that could not be built under the terms of the current regulations, the structure may continue to exist as long as it remains lawful subject to subsections of MSB 17.80.060(A).

17.80.060(A)(1) – a nonconforming structure may not be enlarged or altered in any way unless the alteration or enlargement is otherwise specifically allowed by code. Any nonconforming structure or portion of a nonconforming structure may be altered to decrease its nonconformity.

17.80.060(A)(2) – a nonconforming structure may not be enlarged or altered vertically or horizontally, in a way which would increase the height, width, depth, area, or volume of the structure except as specifically allowed by current code for similar new structures in that location. A nonconforming structure which straddles a required minimum setback line may be expanded vertically or horizontally only where the expansion is located outside the minimum setback distance.

17.80.090(B) – A dwelling made nonconforming through adoption or amendments to Title 17, Zoning, may be replaced or reconstructed within two years after accidental damage or accidental destruction by fire, explosion, or other casualty or act of God. Reconstruction or replacement not completed within two years of the date of the damage is prohibited except in compliance with current regulations. Replacement or reconstruction may be undertaken in the same three dimensional space that it occupied prior to damage or destruction even though the damage or destruction exceeded 50 percent of its replacement value provided it was a legal structure at the date of construction. Except as otherwise specifically allowed by code, reconstruction, and replacement shall not increase the height, depth, area, or volume of the structure beyond that which existed on the date the structure became a pre-existing legal nonconforming structure.

Ordinance 16-051 – Pulled from Introduction and no action taken 08/02/16.

Ordinance 17-088(SUB) adopted September 19, 2017:

17.55.004 – "Aircraft hangar" means a roofed structure which is used to completely or partially enclose and store aircraft and aircraft accessories.

"Boathouse" means a roofed structure which is used to completely or partially enclose and store boats and boating accessories.

"Ordinary high water mark" means the mark made by the action of water under natural conditions on the shore or bank of a body of water which action has been so common and usual that it has created a difference between the character of the vegetation or soil on one side of the mark and character of the vegetation and soil on the other side of the mark.

"Structure" means anything that is constructed or created and located on or above the ground, or created or located on or above the ground, or attached to something fixed to the ground. For

purposes of minimum setbacks and building separation requirements, the following are not considered structures unless specifically addressed by code: fences; retaining walls; parking areas; roads, driveways, or walkways' window awnings; a temporary building when used for 30 days or less; utility boxes and other incidental structures related to utility services; utility poles and lines; guy wires; clothes lines; flagpoles; planters; incidental yard furnishings; water wells; monitoring wells; and/or tubes, patios, decks, or steps less than 18 inches above average grade.

17.55.020(A) – Except as provided in subsection (B) of this section, no structure or footing shall be located closer than 75 feet from the ordinary high water mark of a body of water. Except as provided otherwise, eaves may project three feet into the required setback area.

17.55.020(B)(1) – Boathouses or aircraft hangars which are exempt from a minimum shoreline setback for structures shall:

17.55.020(B)(1)(a) – be built over, in, or immediately adjacent to a waterbody and used solely for storing boats and boating accessories.

17.55.020(B)(1)(b) – be designed, constructed, and oriented for primary access by boats or aircraft directly to a waterbody.

17.55.020(B)(c) – not have more than incidental accessory access to a street or driveway.

17.55.020(B)(d) – not be useable as a garage or habitable structure without significant alteration.

17.55.020(E) – No part of a subsurface sewage disposal system shall be closer than 100 feet from the ordinary high water mark of any body of water. The planning commission shall require this distance be increased where necessary to protect waters within the Borough.

Ordinance 22-014 adopted February 15, 2022:

17.23.170(A) – Minimum structural setback requirements are prescribed in MSB 17.55.

17.23-170(A)(1) – pipeline and conveyor structures are excluded from all setback requirements.

Ordinance 23-002 No action taken at April 4, 2023 Assembly meeting.

Ordinance 23-049 Ordinance was defeated at July 18, 2023 Assembly meeting.

Ordinance 23-079 approved August 15, 2023 – Establishing an Advisory Board to Review and make recommendations to the Assembly regarding water body Setbacks.

CHAPTER 17.55: SETBACKS AND SCREENING EASEMENTS

Section

17.55.004 DEFINITIONS.

(A) For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

- "Aircraft hangar" means a roofed structure which is used to completely or partially enclose and store aircraft and aircraft accessories.

- "Boathouse" means a roofed structure which is used to completely or partially enclose and store boats and boating accessories.

- "Building" means any structure intended for the shelter, housing, or enclosure of any individual, animal, process, equipment, goods, or materials of any kind or nature.

- "Building line" means the line of that part of the building nearest the property line.

- "Dedication" means the reservation of land to a public use by the owner manifesting the intention that it shall be accepted and used presently or in the future for such public purpose. A dedication by the owner under the terms of this section is a conveyance of an interest in property which shall be deemed to include the warranties of title listed in A.S. 34.15.030. The dedication of streets, alleys, sidewalks, or public open space shall convey a fee interest in the area dedicated. The dedication of all other public rights-of-way shall be deemed to create an easement in gross to perform the indicated function in the area depicted.

- "Engineer" means a registered professional civil engineer authorized to practice engineering in the state of Alaska.

- "Incidental" means subordinate and minor in significance and bearing a reasonable relationship to the primary

use.

• “Lot” means the least fractional part of subdivided lands having limited fixed boundaries and having an assigned number, or other name through which it may be identified.

• “Lot depth” means the average distance between front and rear lot lines.

• “Lot frontage” means all property abutting the right-of-way of a dedicated street or road easement, measured along the right-of-way between side lot lines of a lot.

• “Lot width” means the average distance between side lot lines.

• “Official streets and highway plan” means a map and attendant document depicting the proposed system of freeway, arterial, and collector streets in the borough, as adopted by the planning commission and by the assembly, and which is on file in the planning department office, together with all amendments thereto subsequently adopted.

• “Ordinary high water mark” means the mark made by the action of water under natural conditions on the shore or bank of a body of water which action has been so common and usual that it has created a difference between the character of the vegetation or soil on one side of the mark and character of the vegetation and soil on the other side of the mark.

• “Parcel” means an unsubdivided plot of land.

• “Right-of-way” means a strip of land reserved, used, or to be used for a street, alley, walkway, airport, or other public or private purpose.

• “Structure” means anything that is constructed or created and located on or above the ground, or attached to something fixed to the ground. For purposes of minimum setbacks and building separation requirements, the following are not considered structures unless specifically addressed by code: signs; fences; retaining walls; parking areas; roads, driveways, or walkways; window awnings; a temporary building when used for 30 days or less; utility boxes and other incidental structures related to utility services; utility poles and lines; guy wires; clotheslines; flagpoles; planters; incidental yard furnishings; water wells; monitoring wells; and/or tubes, patios, decks, or steps less than 18 inches above average grade.

• “Subdivision” means the division of a tract or parcel of land into two or more lots, sites, or other divisions, or the combining of two or more lots, tracts, or parcels into one lot, tract, or parcel for the purpose, whether immediate or future, of sale or lease for more than ten years, including any resubdivision and when appropriate to the context, the process of subdividing or the land actually subdivided.

• “Surveyor” means a professional land surveyor who is registered in the state of Alaska.

• "Utility box" means electric transformers, switch boxes, telephone pedestals and telephone boxes, cable television boxes, traffic control boxes, and similar devices.

• "Utility services" means the generation, transmission, or distribution of electricity, gas, communications, and municipal water and sewer systems.

(Ord. 21-019, § 2, 2021; Ord. 17-088(SUB), § 2, 2017; Ord. 13-164, §§ 2, 3, 2013; Ord. 93-042, § 2 (part), 1993; Ord. 89-072, § 2 (part), 1989; Ord. 88-221, § 2 (part), 1988)

17.55.005 GENERAL.

This chapter establishes minimum structural setbacks from lot lines, water courses and water bodies, rights-of-way, and specific screening easements for certain lands within subdivisions in the Matanuska-Susitna Borough except where otherwise specified in special land use district regulations within this title.

(Ord. 03-053, § 2, 2003; Ord. 88-190, § 3 (part), 1988)

17.55.010 SETBACKS.

(A) No structure or building line shall be placed within 25 feet from the right-of-way line of any public right-of-way, except no furthermost protruding portion of any structure shall be placed within ten feet from the right-of-way line of any public right-of-way when the pre-existing lot:

(1) measures 60 feet or less in frontage on a public right-of-way, and is not located on a cul-de-sac bulb; or

(2) comprises a nonconforming structure erected prior to July 3, 1973. This setback shall be known as the structure or building line setback.

(B) Except where specifically provided other-wise by ordinance, no furthermost protruding portion of any structure or building line shall be located nearer than ten feet from any side or rear lot line.

(C) Except as otherwise specified by code, eaves may project a maximum of three feet into required setback areas.

(D) The setback requirements of this section do not apply to property within the cities of Palmer and Wasilla.

(E) If a condemnation by a governmental agency reduces the building line setback of a structure below 25 feet, but there remains at least ten feet setback, and the setback reduced by the condemnation met the requirements of this section prior to the condemnation, the resulting setback shall be the setback requirements for the lot.

(F) For purposes of this chapter, commercial or industrial buildings on separate but adjacent parcels, which otherwise meet the setback requirements, may have connecting pedestrian walkways, enclosed or not.

Pedestrian walkways:

(1) shall not contribute to the building area or the number of stories or height of connected buildings; and

(2) must comply with the current adopted edition of the International Building Code, except that the outside width of the walkway shall not exceed 30 feet in width, exclusive of eaves.

(G) No furthermost protruding portion of any structure or building line shall be located nearer than ten feet from railroad rights-of-way, except that utilities and rail dependent structures may extend up to railroad rights-of-way.

(Ord. 11-159, § 2, 2011; Ord. 11-019, § 2, 2011; Ord. 93-042, § 2 (part), 1993; Ord. 88-190, § 3 (part), 1988)

17.55.015 Shorelands; definition. [Repealed by Ord. 17-088(SUB), § 3, 2017]

17.55.020 SETBACKS FOR SHORELANDS.

(A) Except as provided in subsection (B) of this section, no structure or footing shall be located closer than 75 feet from the ordinary high water mark of a body of water. Except as provided otherwise, eaves may project three feet into the required setback area.

(B) Docks, piers, marinas, aircraft hangars, and boathouses may be located closer than 75 feet and over the water, provided they are not used for habitation and do not contain sanitary or petroleum fuel storage facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations.

(1) Boathouses or aircraft hangars which are exempt from a minimum shoreline setback for structures shall:

(a) be built over, in, or immediately adjacent to a waterbody and used solely for storing boats and boating accessories;

(b) be designed, constructed and oriented for primary access by boats or aircraft directly to a waterbody;

(c) not have more than incidental accessory access to a street or driveway; and

(d) not be usable as a garage or habitable structure without significant alteration.

(C) In the city of Wasilla, this section does not apply to structures where construction was completed prior to November 16, 1982. Elsewhere in the borough, this section does not apply to structures where construction was completed prior to January 1, 1987, if the present owner or owners of the property had no personal knowledge of any violation of the requirements of this section prior to substantial completion of the structures. The director of the planning department shall, upon application by a property owner, determine whether a property qualifies for

an exception under this subsection.

(1) An application for a shoreline setback exception shall include a filing fee as established by resolution of the assembly.

(D) In this section, a “structure” is any dwelling or habitable building or garage.

(E) No part of a subsurface sewage disposal system shall be closer than 100 feet from the ordinary high water mark of any body of water. The planning commission shall require this distance be increased where necessary to protect waters within the borough.

(Ord. 17-088(SUB), § 4, 2017: IM 96-019, page 1, presented 3-19-96; Ord. 93-095, § 2, 1993; Ord. 93-042, § 2 (part), 1993; Ord. 90-052, § 3, 1990; Ord. 88-190, § 3 (part), 1988; initiative election of 5-5-87)

17.55.040 VIOLATIONS, ENFORCEMENT, AND PENALTIES.

(A) Except as otherwise specified in this chapter violations of this chapter are infractions.

(B) Remedies, enforcement actions, and penalties shall be consistent with the terms and provisions of MSB 1.45.

(Ord. 95-088(SUB)(am), § 26 (part), 1995)

CHAPTER 17.65: VARIANCES

Section

17.65.010 INTENT.

This chapter addresses variances not otherwise addressed within this title. It is not intended that this chapter replace or supersede variance regulations of other chapters within this title, nor is it intended that this chapter address variances to conditional uses.

(Ord. 90-56, § 3 (part), 1990)

17.65.020 REQUIREMENTS FOR GRANTING A VARIANCE.

(A) In order to grant a variance to the regulations of MSB title 17, the planning commission must find that each of the following requirements has been met:

(1) There are unusual conditions or circumstances that apply to the property for which the variance is sought.

(2) The strict application of the provisions of this title would deprive the applicant of rights commonly enjoyed by other properties under the terms of this title.

(3) The granting of the variance will not be injurious to nearby property, nor harmful to the public welfare.

(4) The granting of the variance will be in harmony with the objectives of this title and any applicable comprehensive plans.

(5) The deviation from the requirement of this title that is permitted by the variance will be no more than is necessary to permit a reasonable use of the property.

(Ord. 90-56, § 3 (part), 1990)

17.65.030 CASES WHERE VARIANCE IS ILLEGAL.

(A) A variance from this title may not be granted if:

(1) special conditions that require the variance are caused by the person seeking the variance;

(2) the variance will permit a land use in a district in which that use is prohibited;

(3) the variance is sought solely to relieve pecuniary hardship or inconvenience.

(Ord. 90-56, § 3 (part), 1990)

17.65.040 VARIANCE; CONDITIONS OF APPROVAL.

(A) The planning commission, in granting a variance, may prescribe any conditions and safe-guards that it deems to be necessary or desirable to:

(1) assure conformity with this title and any applicable comprehensive plans;

(2) protect adjacent properties;

(3) protect the public health, safety and welfare.

(Ord. 90-56, § 3 (part), 1990)

17.65.050 INITIATION OF A VARIANCE REQUEST.

(A) A request to the planning commission for a variance to the requirements of MSB title 17 may be initiated by the property owner or the manager's authorized agent.

(B) A variance application shall be filed with the planning director on a form provided by the planning department.

(C) An application for a variance shall include:

(1) a legal description of the property involved;

(2) a description of the variance requested, including the code section reference;

(3) a specific statement of the reasons why the variance is required and conforms to the requirements of MSB 17.65.020;

(4) a site plan or as-built of the particular parcel or parcels affected, submitted under the seal of a professional land surveyor, which shows all information relevant to the variance request;

(5) an appropriate filing fee as established by the assembly, payable to the borough.

(Ord. 90-56, § 3 (part), 1990)

17.65.070 PLANNING COMMISSION ACTION.

The planning commission shall hear any interested parties and shall render a written decision on the variance application within 30 calendar days from the closure of public hearing.

(Ord. 90-56, § 3 (part), 1990)

17.65.080 RECORD OF VARIANCES.

The planning department shall keep a record of all variances.

(Ord. 90-56, § 3 (part), 1990)

17.65.090 TERMINATION OF VARIANCES.

(A) Any variance granted shall become null and void if:

(1) the variance is not exercised within one year after being granted;

(2) any structure or characteristic of use permitted by a variance is moved, removed or discontinued.

(Ord. 90-56, § 3 (part), 1990)

17.65.100 APPEAL PROCEDURE.

Decisions by the planning commission on a variance application may be appealed to the borough board of adjustment and appeals. Appeals shall be filed and conducted in accordance with MSB 15.39.

(IM 96-013, page 1 (part), presented 3-19-96; Ord. 90-56, § 3 (part), 1990)

17.65.110 VIOLATIONS, ENFORCEMENT, AND PENALTIES.

(A) Except as otherwise specified in this chapter violations of this chapter are infractions.

(B) Remedies, enforcement actions, and penalties shall be consistent with the terms and provisions of MSB 1.45.

(Ord. 95-088(SUB)(am), § 30 (part), 1995)

CHAPTER 17.80: NONCONFORMING STRUCTURES

Section

17.80.010 INTENT.

(A) Within the Matanuska-Susitna Borough there may exist lots, permanent structures, and uses of land and structures, which were lawful before the effective date of the applicable regulations but which would be prohibited, regulated or restricted under the terms of current regulations, or a future amendment. Except as otherwise provided by code, it is the intent of this chapter to permit nonconforming permanent structures to remain until they are removed or abandoned but not to encourage their perpetuation. It is not intended that this chapter replace or supersede nonconformity regulations in other chapters within this title. This ordinance is promulgated pursuant to AS 29.40.040(A)(2) “Land Use Regulations” and encourages the minimization of the unfavorable effects of the construction of structures that do not conform to code.

(B) Nothing in this chapter requires a change in the plans or construction of any building actually under construction or development prior to the effective date of adoption of this ordinance as long as the building was allowable under the code in effect at the start of development. Where excavation, demolition or removal of an existing building has begun in preparation of rebuilding, such excavation, demolition or removal shall be considered to be actual construction or development, provided that continuous progress is being made toward

completion of the project. Development is defined as any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.020 LEGAL NONCONFORMING STRUCTURES.

(A) The following structures qualify as legal nonconforming structures without an administrative determination, however, an administrative determination may be issued if requested by the property owner:

(1) structures built lawfully and made nonconforming by adoption of subsequent ordinances;

(2) structures built in violation of the ordinance existing at the time of construction, then made legal by adoption of subsequent ordinance, and later made nonconforming by adoption of subsequent ordinances;

(3) permanent structures which were constructed lawfully after the date of adoption of the Acknowledgement of Existing Regulations, Chapter 17.01, but which were made unlawful after the date of start of construction due to adoption of subsequent regulations.

(B) The following structures require an administrative determination in order to be granted legal nonconforming status;

(1) structures granted a variance in accordance with Chapter 17.65;

(2) structures built in violation of shoreline setback ordinances existing at the time of construction, and subsequently granted an exemption from shoreline setbacks in accordance with MSB 17.55.020(C);

(3) permanent structures built in violation of ordinances existing at the time of construction, and subsequently granted legal nonconforming status in accordance with MSB 17.80.070.

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.030 FEES.

(A) Applications for determination of legal nonconforming status, made pursuant to MSB 17.80.020(A)(1), (2) and (3), and (B)(1) and (2), are not subject to fees set forth in MSB 17.80.070.

(B) Applications for determination of legal nonconforming status, made pursuant to MSB 17.80.020(B)(3) are subject to fees as set forth in MSB 17.80.070.

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.040 WRITTEN DETERMINATION REQUIRED.

Nonconforming structures, covered under MSB 17.80.020(B)(3), shall not have legal nonconforming status for purposes of this chapter unless a written administrative determination of legal nonconforming status has been issued by the planning director, pursuant to MSB 17.80.070.

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.050 NONCONFORMING LOTS OF RECORD.

Structures and accessory buildings may be erected on nonconforming lots of record as long as they meet all applicable provisions of code. This provision shall apply even though the lot fails to meet the requirements for area, or width, or both, currently applicable.

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.060 STANDARDS FOR NONCONFORMING STRUCTURES.

(A) Where a permanent structure exists that could not be built under the terms of the current regulations, the structure may continue to exist as long as it remains lawful subject to subsections (1) through (4) of this subsection. However:

(1) a nonconforming structure may not be enlarged or altered in any way unless the alteration or enlargement is otherwise specifically allowed by code. Any nonconforming structure or portion of a nonconforming structure may be altered to decrease its nonconformity.

(2) a nonconforming structure may not be enlarged or altered vertically or horizontally in a way which would increase the height, width, depth, area, or volume of the structure except as specifically allowed by current code for similar new structures in that location. A nonconforming structure which straddles a required minimum setback line may be expanded vertically or horizontally only where the expansion is located outside the minimum setback distance.

(3) the physical location of a nonconforming structure may be changed only to reduce or eliminate the nonconformity.

(4) an existing structure devoted to a use not permitted by code shall not be enlarged, extended, moved, or structurally altered.

(B) Structures found in violation of any of the standards set forth in subsection (A) of this section, are not eligible for a determination of legal nonconforming status.

(C) Structures which are in trespass are not eligible for a legal nonconforming status determination.

(D) *[Repealed by Ord. 17-142, § 3, 2018]*

(E) The planning director may not grant legal nonconforming status, pursuant to MSB 17.80.070, unless the applicant provides evidence that the structure was erected prior to the adoption of the Acknowledgment of Existing Land Use Regulations, MSB 17.01.

(F) The planning director will consider public health, safety, and welfare concerns raised in comments received pursuant to MSB 17.80.070(C) when making a determination whether to grant a legal nonconforming determination.

(Ord. 17-142, § 3, 2018; Ord. 01-016, § 2, 2001; Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.070 APPLICATION FOR A DETERMINATION OF LEGAL NONCONFORMING STATUS.

(A) An application for a determination of legal nonconforming status may be initiated by the property owner or his authorized agent. The application shall be filed with the planning director on a form provided by the planning department. The application shall be accompanied by a nonrefundable application fee, established by the assembly, and made payable to the Matanuska-Susitna Borough. The planning director may not grant legal nonconforming status unless the applicant provides evidence that the structure was erected prior to the adoption of the Acknowledgment of Existing Land Use Regulations chapter except as noted herein.

(B) In addition to the completed application form, the submittal shall contain the following items:

(1) description and photographs of the structure;

(2) as-built drawing(s), prepared by a professional surveyor, registered in the state of Alaska, verifying the location(s) or the structure(s);

(3) any other documentation the planning director may deem necessary to evaluate the application.

(C) When an application is submitted, the borough shall give notice of the application by publication in a newspaper of general circulation in the borough at least 15 calendar days before the earliest date the planning director may render a decision.

(D) Notice of the application shall be mailed to owners of all property within 600 feet of the lot lines of the property containing the nonconforming structure at least 10 calendar days prior to the earliest date upon which the planning director may make a final decision on the application. The notice shall contain the following:

(1) the earliest date a decision may be rendered;

(2) brief description of the application;

(3) a vicinity map of the area surrounding the subject property;

(4) legal description of the subject property;

(5) the names of the applicants and owners of the subject property;

(6) the planning department's telephone number; and

(7) identify the location where the application and other supporting material will be available for public inspection.

(E) Prior to the date of the decision, the applicant shall pay the cost of all mailings or advertisements required by this section.

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.080 REPAIRS AND MAINTENANCE.

Except as otherwise addressed by code, nothing in this chapter shall prevent keeping in good repair a nonconforming permanent building or a building in which a nonconforming use is conducted. However, any building that is declared by an authorized official to be unsafe or unlawful by reason of physical condition shall not be restored, repaired or rebuilt in violation of the standards set forth in MSB 17.80.060(A).

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.090 RESTORATION OF DAMAGED PROPERTY.

(A) Except as otherwise addressed by borough code, nothing in this ordinance shall prevent restoration and subsequent continued occupancy and use of a permanent building destroyed to up to 50 percent of its replacement value by fire, explosion, or other casualty or act of God.

(B) A dwelling made nonconforming through adoption or amendments to Title 17, Zoning, may be replaced or reconstructed within two years after accidental damage or accidental destruction by fire, explosion, or other casualty or act of God. Reconstruction or replacement not completed within two years of the date of the damage is prohibited except in compliance with current regulations. Replacement or reconstruction may be undertaken in the same three dimensional space that it occupied prior to damage or destruction even though the damage or destruction exceeded 50 percent of its replacement value provided it was a legal structure at the date of construction. Except as otherwise specifically allowed by code, reconstruction and replacement shall not increase the height, depth, area, or volume of the structure beyond that which existed on the date the structure became a pre-existing legal nonconforming structure.

(1) The borough manager may grant a one time extension of the allowed time to complete rebuilding of a pre-existing legal nonconforming structure which is otherwise eligible for reconstruction under this section. To grant the time extension authorized under this section, the borough manager must find from evidence presented that:

(a) the requirement to rebuild within two years from the date of destruction would result in undue hardship on the applicant;

(b) the applicant diligently pursued reconstruction during the original two-year period; and

(c) the need for an extension is caused by unforeseen and unavoidable circumstances beyond the control of the applicant.

(2) The extension shall be for a specific amount of time, not to exceed three years from the original two-year deadline.

(3) An application for the three-year extension of time to rebuild a pre-existing legal nonconforming structure shall be submitted in writing to the borough manager and shall provide sufficient detail to describe the proposed structure and its compliance with applicable borough code. The application must also contain the evidence required by MSB 17.80.090(B)(1)(a-c).

(4) The borough manager will review the application and make a decision regarding the request. A public hearing is not required. Appeals of this decision are as prescribed in MSB 15.39.030.

(C) The percentage of loss, under MSB 17.80.090(A) and (B) shall be determined by an independent adjustor or appraiser who is Financial Institutions Reform and Recovery Enforcement Act (FIRREA) certified or the appraisal must be accompanied by the appraiser's license number and certification of type of appraisal they are licensed to perform.

(Ord. 01-016, § 3, 2001; Ord. 99-197, § 2, 1999; Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.100 TERMINATION OF NONCONFORMITIES.

When a legal nonconforming permanent structure is abandoned for a period of one year or more, the building shall not then be used except in compliance with this chapter. For the purposes of this chapter, abandonment means discontinuation or failure to complete construction and begin use, for a continuous period of more than one year. Whether the property owners intended to abandon the structure is not relevant to an abandonment determination. Reconstruction of a damaged nonconforming structure is not prohibited after the one-year period if the reconstruction was prohibited due to lawful orders issued by a court or in the course of an arson or criminal investigation.

(Ord. 95-011(SUB1), § 3 (part), 1995)

17.80.110 VIOLATIONS AND ENFORCEMENT.

Violations and enforcement of this chapter shall be consistent with the terms and provisions of Chapter 17.56.

(Ord. 95-011(SUB1), § 3 (part), 1995)

SAMPLE BALLOT

To Be Removed by Election Judge

To Be Removed by Election Judge

FOLD TO THIS LINE

MATANUSKA-SUSITNA BOROUGH
SPECIAL ELECTION

MAY 5, 1987

SETBACK & PUBLIC EASEMENT INITIATIVE
AREAWIDE

- Mark only by use of cross marks, "X" marks, check or plus signs. Place marks in squares.
- Marks must be inside or touching the squares so as to indicate the intent of the voter. Erasures and corrections will invalidate only that part of the ballot on which it appears.
- If you spoil or mar your ballot you may return it to the election judge and receive another ballot.

SHALL AN ORDINANCE READING AS FOLLOWS BE APPROVED TO RESTORE THE BUILDING SETBACK OF 75 FEET FROM LAKES AND STREAMS, AND ON BOROUGH LAND ESTABLISH A 50 FOOT PUBLIC EASEMENT, IN THE MATANUSKA-SUSITNA BOROUGH?

"The purpose of this ordinance is to maintain fisheries resources, water quality and public access to water.

Setbacks. A. No structure or footing shall be located closer than seventy-five feet from the ordinary high-water mark of a watercourse or body of water, except as provided in subsection B of this section.

B. Docks, piers, marinas and boathouses may be located closer than seventy-five feet and over the water provided they are not used for habitation and do not contain sanitary facilities. Water wells may be located no closer than ten feet from the ordinary high-water mark.

C. In this section, a "structure" is any dwelling or habitable building or garage.

The Borough shall establish a minimum 50-foot public easement landward from the ordinary high water mark before it sells or leases its land adjacent to any lake larger than three acres, adjacent to any anadromous fish stream, or any of its land reasonably required for public access to such lakes or streams. At the least, the easement shall allow the passage of the public by foot, dogsled, or horseback.

If a majority vote favors the ordinance, this ordinance becomes effective upon certification of the election."

☐ YES

IM87-190

☐ NO

Article VI. Shorelands

16.25.460 Shorelands—Definition.

"Shorelands" means that upland within three hundred feet of any lake, pond, or watercourse, and within three hundred feet from any river or stream or to the landward side of the floodplain, if that distance is greater. (Ord. 81-68 § 3 (part), 1981)

16.25.480 Setbacks.

A. Except as provided in subsection B of this section, no structure or footing shall be located closer than forty-five feet from the high water mark of a watercourse or body of water.

B. Docks, piers, marinas and boathouses may be located closer than forty-five feet and over the water provided they are not used for habitation and do not contain sanitary facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations. Water wells may be located no closer than ten feet from the high water mark. (Ord. 86-101 § 2, 1986: Ord. 86-85 § 2, 1986; Ord. 84-34 § 40, 1984: Ord. 81-68 § 3 (part), 1981)

16.25.500 Lot dimensions.

Lots adjacent to a watercourse or body of water shall be a minimum of one hundred forty feet in width at the water line, as measured directly between property corners at the water line, or a minimum of eighty-five feet in width if community sewerage is provided to the lot. (Ord. 81-68 § 3 (part), 1981)

Article VII. Utility Access

16.25.540 Utility access.

The Platting Authority may require dedication of utility easements along lot lines, rights-of-way or through subdivided lots as required by the public utility companies. (Ord. 81-68 § 3 (part), 1981)

Article VIII. Drainage

16.25.560 Drainage.

The size and slope of drainage structures or ditching shall be sufficient to carry seasonal high-water volumes for existing conditions and also any additional high-water volumes which may be created by future development of a similar nature. Temporary and permanent erosion/runoff control shall be designed by the subdivider's engineer in compliance with the governing Federal and State statutes and regulations. (Ord. 81-68 § 3 (part), 1981)

Article IX. Water Supply

16.25.580 Fire protection.

Fire hydrants or other water sources shall be provided for fire protection if required under the standards of Section 16.50.050. (Ord. 84-82 § 2, 1984)

Chapter 16.30

SUBMISSION REQUIREMENTS

Sections:

16.30.010 Preliminary plat—Submission requirements.

A. The preliminary plat shall include all land under contiguous ownership unless separate

Matanuska-Susitna Borough Shoreland Setbacks

Analysis and Recommendation

Prepared by:

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LDN
LAND DESIGN NORTH

Table of Contents

Introduction

Since 1973, the Matanuska Susitna Borough has been struggling with the designation and implementation of an appropriate waterbody setback distance from area lakes, streams, and wetlands to protect water quality and fish and wildlife habitat. From 1973 to the present, structural setbacks from waterbodies have ranged from 45 to 75 feet and have allowed accessory uses such as piers, marinas, boathouses and docks over the water. The setbacks to date have only regulated structure placement and have not regulated uses or activities within the setback zone. For example, there are currently no requirements to maintain natural vegetation or limit the amount of impervious surfaces.

The inherent challenge of the project is that people have varying goals and values relative to the use of water resources and lands. Over the years, arguments have been presented to maintain, increase, and decrease the setback distance. Arguments in favor of a lesser setback generally cite private property rights, undue hardships on developing land, increased views and access to waterbodies. Those in favor of greater setbacks cite improved water quality, enhanced fish and wildlife habitat, noise reduction, and improved aesthetic values.

In 1998, a Shorelands Steering Committee was formed to recommend goals and strategies to analyze and improve the management of shorelands and develop a Shorelands Management Plan. The results of their work can be found in Appendix A. In summary, the long-term goal of the Matanuska-Susitna Borough Shorelands Management Plan is to determine how inland lake basins, streams and wetlands function as ecosystems within the watershed and how to manage the many resources and values present in these systems in a sustainable manner. While this is an admirable goal, this long-term goal can be reached only through a comprehensive watershed study and the long-term investment of dollars, expertise and collaborative effort by government, universities and the private sector.

This report is intended to meet the more immediate need of resolving the shoreland setback issue and to establish effective performance standards for uses within the setback zone to minimize future requirements for mitigation or restoration of disturbed areas and degraded water quality. As the Mat-Su Borough continues to grow in population and becomes one of the most popular recreational destinations in Alaska, the threat of degradation to its waterbodies increases. An altered water system is not only difficult to restore, it is expensive and may never fully recover. This can mean declining property values, loss of recreational activities, loss of water-dependent businesses, and a decline in fish and wildlife populations. Simply put, no one wants to live, recreate or conduct business on a polluted waterbody.

This purpose of this report is to review and incorporate by reference the work done to date on the Shoreland Management Plan and recommend a setback distance that will protect water quality in the Mat-Su Borough. This interim report also seeks to:

- Understand the intent and history of structural setback regulations in the Mat-Su Borough
- Define and understand the function of the relatively narrow strip of land (the riparian zone) surrounding a waterbody
- Review the role of setbacks as a management tool to enhance and protect water quality from residential, commercial and industrial development based on the literature review conducted by the Mat-Su Borough and supplemented by work done as part of the Big Lake, Lake Management Plan.
- Recommend a structural setback and performance standards

Finally, to help provide information of similar efforts in other jurisdictions, a literature review done by the Mat-Su Borough as part of the Shoreland Management Plan is provided in Appendix A. It briefly describes available literature on how other jurisdictions establish setbacks and manage shorelands, the use of buffer zones, the role of riparian vegetation, and the balancing of private property rights, public access and safety, and environmental issues. It should be noted that this review only provided a brief summary of the literature and did not analyze or document the different setbacks studied. For this reason, an analysis of setbacks done as part of the Big Lake, Lake Management Plan is being used for this report.

Setback History

An important aspect of evaluating regulations is to clearly understand their intent and historical context to determine if the existing regulation has been effective. Presented below is a brief synopsis of the Matanuska-Susitna Borough (MSB) setback ordinances and the Mat-Su Borough Coastal Management Program policy regarding setbacks to date.

- 1973. Borough adopts a 75-foot Setback (MSB ordinance 73-6). "Structures shall not be closer than 75 feet from the normal high water mark of a water course or body of water in a shoreland. The Commission may require a greater setback if it finds that a specific body of water possesses unique characteristics such as outstanding fish and aquatic life, shore cover, natural beauty or other ecological attribute. Boat houses may be located over the water provided they are not used for habitation and do not contain sanitary facilities." In subsequent years the ordinance was amended to legalize docks, piers and marinas over the water and require that they conform to state and federal regulations.

- **1984.** The Mat-Su Borough Coastal Management Program (MSBCMP) goes into effect which, as outlined in Coastal Habitats Policy 2, upholds the 75 foot setback but eliminates all provisions to allow the Platting Board to reduce setback distances if certain conditions are met. Approved by the Coastal Policy Council (CPC) in **1983,** this policy raised issues of compliance with MSB ordinances and eliminated flexibility in the existing regulations.

- **1986.** Borough adopts a 45-foot setback (MSB ordinance **86-101).** "No structure or footing shall be located closer than 45 feet from the high water mark of a watercourse or body of water, except docks, piers, marinas, and boathouses may be located closer than 45 feet and over the water provided they are not used for habitation and do no contain sanitary facilities." "Exception: Does not apply to structures where construction was completed prior to January **1, 1987** if the present owner or owners of the property had no personal knowledge of any violation of the setback requirements prior to substantial completion of the structure."

- **1987.** The MSB submits revisions to the MSBCMP Coastal Habitats Policy 2 in order to create a more flexible policy. The Division of Governmental Coordination (DGC), staff to the CPC, determines that the proposed policy lacks enforceable language, and in cooperation with the **MSB** and the state, develops alternative policy language consistent with the Alaska Coastal Management Program. The revised policy is adopted by the CPC in March of **1988,** with provisions that the proposed uses and activities within 75 feet of the high water line "must be reviewed to ensure protection of water quality and fish and wildlife habitat." Additionally, water-dependent structures (including docks, piers, marinas, boathouses and floatplane hangars) are allowable within 75 feet provided "they are constructed and used in a way that minimizes adverse impacts to water quality and fish and wildlife habitat." Finally, the policy states that other uses and activities within 75 feet are also allowable if the proposed development "will have no sianificant adverse impacts on water quality and fish and wildlife habitat, and complies with other applicable federal, state, and local requirements."

- **1987.** Borough reinstates a 75-foot setback (MSB ordinance **87-59) .**The setback is changed to 75 feet with the provision that water dependent structures such as docks, piers and marinas are allowable within 75 feet if they conform to all applicable state and federal statutes and regulations, and so long as they "are not used for habitation and do not contain sanitary or petroleum fuel storage facilities."

- **1988.** Clarification and amendments (MSB ordinance **88-190).** The term "Shorelands" is defined, and the setback remains at 75 feet with the provision that "the Director of the Planning Department or the designee of the director shall upon application by a property owner, determine whether a property qualifies for an exception." There is also a subsection allowing the Planning Commission *to* increase the distance of a subsurface sewage disposal system from any body of water beyond the 100-foot zone "where necessary to protect waters within the Borough."

Based on a review of above history, the two critical flaws in the current setback have been identified:

(1) The intended purpose of the waterbody setback appears to be to protect water quality and in turn fish and aquatic habitat; however, it is not clearly defined. It is recommended that the intent of the waterbody setback be clearly stated up front in future ordinances to facilitate enforcement and compliance. A property owner is more willing to comply with a regulation if they clearly understand its purpose and believe that the regulation is effective at achieving its purpose. To evaluate the effectiveness of a setback, it is critical to understand what is trying to be accomplished with the regulation. An example purpose statement might read as follows:

> "The intent of the waterbody setback is to preserve the integrity of the Borough's lakes, streams, rivers, and wetlands by maintaining and improving water quality, shore cover, fish and wildlife habitat, and aesthetic values."

(2) The setback only addresses the placement of structures. It does not address what can and cannot be done within the 75-foot setback area. The flaw with this approach is that locating buildings back from the waterbody may or may not meet the intent of the regulation. One of the greatest threats to water quality is Non Point Source (NPS) pollution. NPS pollution is defined as pollutants carried in runoff originating from various sources; precipitation moves over and through the ground and picks up pollutants from these sources and carries them into rivers, lakes, and groundwater. Some of the major sources and causes of NPS pollution adjacent to waterbodies are erosion and sedimentation (from cleared lots), septic systems, and runoff (carrying oils, chemicals, fertilizers and pesticides). A structure that is placed 75 feet back with vegetation cleared to the edge of the shoreline may increase the threat to water quality and in turn harm fish and wildlife habitat and the aesthetic qualities of the site by increasing the amount of NPS running into the waterbody. Whereas a structure setback of only 45 feet with vegetation retained between the structure and the shoreline may do more to protect water quality. The vegetation can slow runoff, trap sediment, and act as a natural filter to remove pollutants.

Another challenge with the history of setbacks in the Borough is the fluctuating distances and general lack of compliance by property owners. The low compliance is at least partially symptomatic of the lack of understanding of the ordinance's purpose. This has resulted in inconsistent development around waterbodies and in turn has made enforcement very difficult.

Function of Buffer Zones (Setbacks)

Literature associated with the protection of water quality defines buffer zones or setbacks as corridors of undisturbed natural vegetation or, where this is not present, grass or other erosion resistant vegetation, between a waterbody or wetland and an area of more intensive land use such as residential development. The use of natural buffer zones to protect water resources from pollution is attracting considerable attention within the United States and globally. Early research in this area stemmed from adverse impacts associated with timber and agriculture industries and has since evolved to consider the impacts of urban development including residential, commercial and industrial uses.

To understand the impacts from development, it is important to understand the watershed concept. A watershed includes the entire land form drained by streams and rivers and is the ultimate water source for a lake. The visible area of a watershed is the surface on which rain and snow fall. The larger, invisible portion of the watershed lies beneath the surface where water seeps into the ground. A raindrop travels from a mountain top to a lake in three ways: (1) some is absorbed by the soil; (2) some collects on the ground in depressions; and (3) some flows overland. It is the overland flow or runoff that poses the greatest threat to water quality. With the overland flow, the raindrop forms rivulets, which in turn join to form streams, and the streams join to form rivers, and so on. Whatever that raindrop picks up from the land along its journey ends up in the water. The greater the amount and speed of runoff the greater the potential impacts. The primary benefits of a waterbody setback are:

- **Maintain and Protect Water Quality** – Improve the quality of water passing through the buffer zone by trapping suspended sediments and removal of toxic substances, nutrients and pathogens carried in the surface water runoff.

- **Anchor Shoreline and Stream Banks and Control Erosion** – The shallow water table in the riparian zone makes water available during the growing season, creating a healthy terrestrial plant habitat for both soil and woody-debris-rooted plants. These in turn reduce erosion by anchoring the soil and trapping suspended sediments.

- **Provide Flood Control** – During periods of high runoff riparian and upland wetlands store and convey flood water. This storage function has the dual effect of moderating peak flows during high runoff events and augmenting ground and surface water flows during low runoff periods.

- **Protect Fish and Wildlife Habitat** - Riparian zones typically support greater numbers and diversity of fish and wildlife. Many terrestrial and aquatic animals use this area for foraging and feeding, breeding and rearing their young, and taking protective cover during 1 or more life stage.

- **Promote Scenic, Recreational, and Quality of Life Values** – The setback serves as a physical buffer between human activities on land and on the water. Scenic, recreation and wildlife assets are enhanced by buffer zones and can increase property values. Setbacks around busy recreational lakes and rivers can also help to reduce noise impacts on surrounding land uses.

While most people can agree on the function of a buffer zone, research reveals that the width of setbacks varies greatly. It is generally accepted that the use of buffers is most effective when the setback criteria reflect:

- Site-specific characteristics of the development area (slope, topography, vegetation, vulnerability to soil erasion, surface and groundwater hydrology)

- Type of proposed disturbance or land use

- Existing land uses around streams and lakes within the watershed

- Function of the buffer zone (sediment filtering, shading, shoreline stabilization by vegetation root systems, food and cover for fish and other wildlife)

- Resource aspects of greatest sensitivity and vulnerability to disturbance

- Flexibility in implementation

Unfortunately, this site-specific approach to defining setback distances requires significant resources to inventory all lands, develop a fair implementation process to avoid arbitrary and capricious decisions, and to enforce. For this reason, most governing bodies designate a set distance from a waterbody for structures and include minimum performance standards regulating the use of the buffer zone.

A number of studies have been conducted to understand the relationship of buffer strips of various distances to fish populations and aquatic habitat productivity in affected streams and the effects of development activities on lake water quality. Studies have also examined the effects of development activities which occur adjacent to or in proximity to lakes and streams to determine the actual effects of the disturbance and demonstrable reductions in impact with varying levels of separations (setbacks) between the development and the waterbody. Environmental parameters studied have included changes to:

- Stream flows

- Light intensity

- Water temperature

- Concentrations of suspended and settled sediments

- Presence of large woody debris

- Nutrient loads in surface runoff and groundwater

- Water-transported contaminants such as pesticides, herbicides, and fungicides

Below is a summary of some of the studies reviewed and the buffer widths that are recommended for the resource protection and the protection of fish and aquatic populations:

- **Stream Temperature:** For development or resource extraction activities which entail the removal of overstory vegetation along streams, buffer strips are one of the most effective means for maintaining water temperature in a range and seasonal pattern most beneficial to fish. Buffers greater than **100** feet have been found to provide as much shade as old growth undisturbed forest. Undisturbed buffer strips from **50 to 100 feet** in width were found to maintain water temperatures with a normal range under some circumstances, partially dependent on stream course orientation and the buffer placement.

- Erosion and Sedimentation: In the Pacific Northwest, buffer strips **50 to 100** feet wide reduced stream sedimentation from adjacent patch-timber harvest activities; however, the sediment levels in the stream using the 50 to **100** foot buffer were **still** 50 percent greater than an undisturbed portion of the watershed. **A** more sensitive indicator of the effects of introduced sediments on streams is the measurement of changes to the permeability of streambed gravels. Streambed permeability has a more direct bearing on the success of survival for developing eggs and egg sac fry present in the gravels of the stream. Logging activities conducted with an adequate stream setback buffer have shown minimal changes to stream gravel permeability. Logging activities that did not incorporated setback buffers were found to decrease stream gravel permeability more than **50** percent for at least **6** years following logging.

- Large Woody Debris: Removal of nearly all riparian trees along streams can eliminate the source of large woody debris in second growth forests and old growth forests for a period of **40 to** 100 years after disturbance. Associated effects on fish habitat can include changes to riffle and pool frequency and loss of overhanging and undercut banks important to juvenile fish and changes in availability of critical overwintering habitat. For logging activities and similar clearing disturbances, studies have shown that buffer strips of ***50*** to **425** feet (British Columbia) and **15** to **130** feet (Southeast Alaska) produced more juvenile salmon in the summer and sheltered more juvenile salmon during the winter than areas without buffers.

- Water Quality: Buffer strips have been shown to improve or avoid declines in dissolved oxygen concentrations in streams primarily by keeping clearing debris and sediments out of streams and providing shade conditions that maintain natural water temperatures (cooler water contains higher levels of dissolved oxygen). Buffers of **20 to 130** feet have been shown to be effective in preventing logging slash from entering streams in the Pacific Northwest.

Cities and Boroughs throughout the United States and Canada use also setback criteria to protect development structures from the potential effects of flooding, stream bank migration, winter icing and to protect water quality and fish and wildlife habitat. Typically the setbacks are included as part of a more extensive zoning ordinance or Shoreland Protection Ordinance and detailed minimum development standards are used in conjunction with structural setbacks. Development standards typically regulate the type of uses, amount of impervious surfaces, and restrict tree cutting and the clearing of vegetation within the setback zones. Presented below is a summary of representative setbacks/buffer strips used by local governments including the key conditions that must be met as part of the setback.

Location	*Setback (from ordinary high water mark)*
Municipality of Anchorage Title 21 - Stream Protection	• A minimum of 25 feet wide on either side of the stream • No vegetation may be cleared or disturbed, no grading or excavation may be done, and no structures, fill or paving may occur within 15 feet of the stream. • Within the stream protection setback, located between 15 and 25 feet from the stream, landscaping is permitted.
Anchorage Wetlands Management Plan 1995 Setbacks from Wetlands	• Minimum setback is 25 feet. • 100 feet from anadromous fish streams • 85 feet from certain headwaters and tributaries • 65 feet from all other water bodies. • Allows for customized setback as part of the permitting process • Requires undisturbed buffers between 15 and 25 feet depending on wetland types and interactions • Setbacks and buffers shall remain undisturbed to the maximum extent
Willow Sub-Basin Area Plan Logging Buffer (Undisturbed Vegetation) Strips	• Minimum 50-foot buffer, larger setbacks to be determined on a site-specific basis
Susitna Area Plan - Logging Buffer (Undisturbed Vegetation) Strips	• Minimum 100 feet from anadromous fish streams or other acceptable measures • 100 feet to ¼ mile (greater than 300 feet for visual quality, recreation, and wildlife habitats • 100 foot buffer for wetlands greater than 100 acres with a locatable stream outlet • 60 foot buffer for wetlands 40 to 100 acres with no locatable stream outlet
Hatcher Pass Management Plan - Logging Buffer (Undisturbed Vegetation) strips	• 200 foot buffers on specific streams • 100 feet on all other perennial streams to include all riparian vegetation (but not less than 50 feet)
Alaska Department of Fish and Game – Timber Harvest Activity Buffer (Undisturbed Vegetation) Strips	• 100 foot setback buffer from stream or lake shoreline, the upland edge of all stream/lake contiguous wetlands, all fish streams, and all lakes connected by surface drainage to fish streams
Pacific Northwest - Logging Buffer (Undisturbed Vegetation) Strips	• Recommended 50 to 100 feet
Southeast Alaska - Logging Buffer (Undisturbed Vegetation) Strips	• Recommended 15 to 130 feet
Department of Environmental Programs, Metropolitan Washington Council of Governments	• A minimum setback buffer of *20* feet is recommended • 100 to 300 feet for adequate removal of the smaller sized sediment particles found in urban runoff
Bellevue, Washington Shoreline Overlay District	• No clearing, grading, excavating, or fill within 25 feet • No commercial parking facilities within 25 feet, • 25 foot setback for structures except docks, piers, and boathouses • Requires plan indicating methods for preserving shoreline vegetation and control of erosion

Location	*Setback (from ordinary high water mark)*
York, Virginia Watershed Overlay District	• 200 foot buffer strip from tributary streams and public water supply reservoirs, maintained in natural state or planted with erosion resistant vegetation
Lake Tahoe Shorezone Tolerance Districts	Explicit development standards are based on physical characteristics for 8 shorezone districts. Three districts are summarized: • Backshore (defined as the area of wave run-up or instability plus 10 feet – whichever is greater) - Allowable base land coverage in this zone is 1%. Naturally occurring vegetation shall not be removed or damaged unless otherwise authorized under a permit. • District 1 (generally the beach area that separates lakes from marshes and wetlands) – Access to the shoreline shall be restricted to planned footpaths which minimize the impact to the backshore. Vegetation shall not be manipulated or otherwise disturbed except when permitted. • Districts 2 and 3 – Permitted development may be conditioned upon installation and maintenance of vegetation to stabilize backshore areas and protect eroding areas from further destruction.
Ozaukee County, Wisconsin shoreland Protection	• 75 feet for all buildings except piers, marinas. boathouses • Boathouses must be set back 2 feet. • Tree cutting – No more than 30 percent of the length shall be clear cut to the depth of the strip. Cutting of the strip shall not create a clear cut opening in the strip greater than 30 feet wide for every 100 feet of shoreline. In the remaining 70% length of the strip, cutting shall leave sufficient cover to screen cars, dwellings, accessory structures (except boathouses) from the water.
Douglas County, Wisconsin	• Minimum protection Zone-75 feet • Moderate protection zone –100 feet • Maximum protection zone -125 feet
Minnesota Department of Natural Resources	• Recommends shoreline vegetative buffers of a minimum of 15 to 25 feet • 30 feet setbacks will accommodate the needs of most shoreline wildlife
Statewide Standards for Management of Shoreland Areas - Minnesota	• Setbacks based on density and lot size. Setbacks range from 75 to 265 feet. 40,000 square foot lot with single family home requires 150 foot setback • At least 10 feet for accessory structures. • Limited clearing of trees and shrubs and cutting and pruning, and trimming of trees to accommodate the placement of stairways and landings, picnic areas, access paths, beach and watercraft access areas, and permitted water-oriented accessory structures as well as providing a view to the water from the principal dwelling site in shore and bluff impact zones is allowed provided that: - The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer leaf on conditions, is not substantially reduced. - Along rivers, existing shading of water surfaces is preserved. • Impervious surface coverage of lots must not exceed 25 % of the lot area.
Landscape Planning Environmental Applications William Marsh, 1991.	Buffers widths generally greater than 50 to 100 feet in urban areas have been shown to be extremely efficient in sediment removal (up to 90 percent or more) if they meet the following design criteria: • Continuous grass/turf cover • Gentle gradients, generally less than 10 percent • Shallow runoff depth, generally not exceeding the height of the grass. • In hilly terrain, buffers should be located on upland surfaces and integrated with depression storage and soil filtration measures

Recommended Setback

Properly incorporated into planning, design, permitting, and construction criteria, setback buffers are an invaluable tool for minimizing future requirements for mitigation or restoration of disturbed areas. It is recommended that the Borough retain the 75-foot setback and regulate the activities within the setback using performance standards to ensure that the intent of the setback is met. A 75-foot setback is justified for the following reasons:

- A comprehensive scientific evaluation of effective shoreline setback distances in the Borough has not been completed. Due to the magnitude of such a project and limited resources, it is unlikely it will be completed in the near future. In addition, the literature reveals that the widths of setbacks vary significantly even when based on sound scientific research. Literature generally supports site-specific setbacks; however, this is an unrealistic approach with the Borough's limited resources.

- Lacking scientific data gathered along the shorelands of the Mat-Su Borough, a change in the setback is politically unpopular and is a highly charged issue. Those in compliance with the 75-foot setback do not want to see a lesser setback and are concerned about view obstructions and other impacts to the waterbody environment. Regulating agencies and environmental groups would also resist a lesser setback because of adverse impacts and would like to see at least a 100-foot setback. A larger setback could result in more variances being required, increased non-compliance, and lengthy challenges.

- A process still exists to apply for a variance to reduce the setback if it presents the property owner with an undue hardship.

- Literature supports a setback of between 50 and 100 feet with the inclusion of minimum development standards. This indicates that 75 feet is a reasonable distance to offer at least some protection to natural resources under a variety of development scenarios.

Recommended Minimum Performance Standards

Effective performance standards or Best Management Practices are enforceable and can be consistently applied to all property owners. This will add increased protection to the Borough's waterbodies as they become more popular and more heavily populated, and it will help to bring Mat-Su Borough ordinances on shoreline development into compliance with the provision of the Mat-Su Borough Coastal Management Program (MSBCMP) that "proposed uses and activities within 75 feet of the high water line must be reviewed to ensure protection of water quality and fish and wildlife habitat."

Regulation of activities within the 75-foot setback must focus on the following two concerns which can have a significant impact on water quality, fish and wildlife habitat, and the aesthetics of shorelands and waterbodies:

- **Loss of riparian vegetation:** Removal of existing vegetative cover in the riparian zone to provide shoreline access for boats, create lawn, or for other activities is likely to lead to erosion and sediment transport in runoff waters into the waterbody. Vegetation in this zone helps to filter sediment, nutrients, and pollutants out of surface runoff, while stabilizing banks, controlling erosion, and dissipating floodwaters. Additionally, many terrestrial and aquatic animals use this area for foraging, breeding and rearing their young, and taking protective cover.

- **Use of impervious surfaces:** An impervious, or nonporous surface is one that will not allow water infiltration such as blacktop, concrete and rooftops. Runoff water from these surfaces increases the rate at which pollutants and excess nutrients are carried the water. Impervious surfaces also interrupt natural drainage patterns and can cause shore degradation through concentration of runoff and erosion.

Uniform application and consistent enforcement of specific performance standards can effectively address the above concerns before development starts, at a point when such measures are both inexpensive to the property owner and easy to implement. Moreover, the following measures will also address visual impacts and can serve to buffer and reduce noise generated on the waterbodies.

1. Preserve a minimum 25-foot wide buffer of undisturbed native vegetation across a total of 30 percent of the parcel's shoreline. This zone is a permanent planting and should be left untouched, except for the removal of select or fallen trees. In the remaining 70 percent of the buffer zone, limited clearing of trees and shrubs and cutting and pruning of trees is permitted to accommodate the placement of stairways' and landings, picnic areas, access paths, beach and watercraft access areas, and permitted water-oriented accessory structures as well as providing a view to the water from the principal dwelling site is allowed provided that:

    - The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer leaf on conditions, is not substantially reduced.
    - Along rivers, existing shading of water surfaces is preserved.

    These provisions shall not apply to the removal of dead, diseased or dying trees.

2. In cases where the following land uses are present within the 75-foot buffer zone, an additional **15-foot** wide vegetative buffer, the same length as the use, must be in place between the use and the shoreline to intercept runoff. Non-native vegetation can be used in this zone.

    - Driveway
    - Parking lot
    - Road
    - Car wash
    - Dog kennels
    - Boat Maintenance and Other Repair Activities

3. Any paved, impermeable, or roofed surfaces within the 75-foot buffer zone must have an infiltration bed of sufficient size to control the velocity and volume of runoff.

4. Impervious surface coverage of lots must not exceed ***25*** percent of the lot area.

5. Boathouses must be set back 2 feet from the water's edge, and are of a height and color so as not to detract from the natural beauty of the shoreline and shall not be used for human habitation.

6. Development shall be accompanied by a site plan indicating methods of preserving shoreline vegetation and for control of erosion during and following construction.

7. **All** structures, accessory buildings and ancillary facilities, other than those related to water use such as **docks,** piers, and boat houses shall be set back a minimum of 30 feet from the ordinary high water mark.

8. Parking shall not be permitted over water or within 30 feet of the shoreline.

In cases where a property owner seeks a variance from the 75-foot buffer, it is recommended that the above performance standards still apply.

Conclusion

Some regulation is necessary to preserve the value and enjoyment of the Borough's waterways, especially as they grow in popularity for residential and recreational use. **A** recommended **75-foot** setback with minimum performance standards begins to address the protection of water quality and fish and wildlife habitat. In addition, the vegetated setback also serves an important function in the protection of values associated with quality of life to include noise reduction and aesthetics.

However, because water quality is intrinsically linked to the day to day activities of residents and users on and surrounding the waterbody, education is also critical to preserving the resource. Therefore, it is also recommended that in addition to the Matanuska-Susitna Borough's Property Owner's Guide to Shoreline Landscaping, a booklet containing Best Management Practices for waterfront property owners be developed promoting responsible development. Example Best Management Practices might include the following.

- Protect bare soil surfaces. Vegetation is the best protection because it both absorbs and uses water. Seed and mulch exposed soil within the watershed as soon as possible after disturbance (gardens, construction sites, etc.).

- Use fertilizer sparingly. All fertilizers are carried in runoff and dissolve into the groundwater. Use non-phosphate varieties.

- Do not concentrate or channelize water flow unless absolutely necessary. On undisturbed slopes, water percolates through soil slowly. When all runoff is focused on one spot, such as a culvert or roof gutter, the natural protection of the ground surface is often not sufficient to prevent this extra flow from breaking through to bare soil. If runoff must be directed, protect the outflow area with an energy dissipator, such as rock or securely anchored brush, that will withstand storm flows.

- Prevent water from running off roads, driveways, roofs or lawns directly into lakes and streams. Direct surface runoffs into natural depressions, or flat, wooded areas, where the water can seep into the around slowly.

- Keep septic tanks maintained. Pump every 2-3 years for year-round homes: every 5-6 years for seasonal cottages. This expense is well worth every penny. Pumping is the key to keeping your septic system working. It *is* far less expensive to pump than to have a new leaching field installed.

- Avoid the use of phosphate containing detergents.

- Don't wash vehicles near the waterbodies.

- Use lawn clippings and leaves as mulch for shrubs and gardens. Pile these where they will not be washed into the waterbodies by heavy rains.

- Don't provide feed for wild ducks and geese. As pretty as these may be, large numbers of Canada Geese have become major problems and polluters (fecal coliform) of lakes elsewhere in the state.

- Place manure and composting piles as far as you can from the waterbodies or from drains or ditches which lead directly to lakes or streams.

- Limit human use or animal use of vulnerable areas. Trails can channel the flow.

- Establish temporary berms during construction to contain runoff overflow.

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DRAFT
October 28, 1998

MATANUSKA-SUSITNA BOROUGH

350 East Dahlia Avenue, Palmer, Alaska 99645-6488
Planning and Land Use Department, Code Compliance Division
(907)745-9853 FAX:(907) 745-9876 E-mail: *ccb@msb.co.mat-su.ak.us*

SHORELANDS MANAGEMENT STUDY
QUESTIONNAIRE

The Planning Department of the Matanuska-Susitna Borough has an FY99 **309** Enhancement Grant from the Alaska Coastal Management Program (ACMP) to study how people want the ***shorelands*** to be managed. As the communities of the Borough, especially their outdoor activities and amenities, continue to attract new residents, businesses, and visitors, how much value will people place on integrating the natural framework of creeks, rivers, lakes, and drainage basins with the life-styles and economic opportunities of the Borough?

The Planning Department is asking for help from a broad spectrum of interests. Whatever your background, the Borough is interested in your local knowledge, phrasing of problems, and ideas for managing the ***shorelands***. How can the ***shorelands*** be integrated into a community that places great value on private market activities and community organizations, and has a strong dislike for government regulation?

1. What are **your current activities** and **uses** of the ***shorelands?***

- ❑ residence or second home
- ❑ camping or temporary residential use
- ❑ commercial or industrial business
- ❑ fishing or hunting
- ❑ guiding or tourism
- ❑ job or work
- ❑ walking, bicycling, **skiing,** or other non-motorized recreation
- ❑ boating, flying, snow machining, or other motorized recreation
- ❑ access to waterways
- ❑ sightseeing or traveling through Borough

What are your **other activities or uses?:**

2. Does anything **displease, disturb, or threaten** you about uses and activities on the ***shorelands?***

- ❑ Disruption from motorized vehicles, boats and airplanes
- ❑ Rudeness among residents, visitors, and neighbors
- ❑ Infringement of privacy and property rights
- ❑ Declining fishing and hunting opportunities
- ❑ Interference with private market
- ❑ Shrinking of job opportunities
- ❑ Fragmented habitat and wildlife systems
- ❑ Flood damage from bluff failure and changing stream patterns
- ❑ Declining environmental quality
- ❑ Crowded recreation and tourism destinations
- ❑ Limited public access to public lands and waters
- ❑ Loss of heritage and damage to artifacts

Can you identify other **problems** and **threats** regarding ***shorelands?:***
What do you **want to see happen** on the ***shorelines?***

- ❑ **A** linked and adequate system of habitat for small and large wildlife
- ❑ Positive protections of anadromous streams in development projects
- ❑ Encouragement of existing riparian vegetation and protection of natural systems in developing areas
- ❑ Protection of the native vegetation, soils, and waterways in large natural areas
- ❑ **An** overall system to avoid the dangers to life and property from flooding
- ❑ Identification of development opportunities and incentives that are consistent with ***shorelands***
- ❑ Integration of ***shorelands*** with fire safety
- ❑ Encouragement of commercial and industrial patterns that incorporate the values of ***shorelands***
- ❑ Identification of access and other needs of resource based industries
- ❑ Preservation of quality recreational and tourism opportunities
- ❑ Friendliness and cooperation among neighbors, visitors, and residents
- ❑ Identification and integration of heritage resources in ***shorelands*** activities and uses
- ❑ Public procedures that encourage partnerships and a cooperative spirit to protect and develop ***shorelands***

What else would you **like to happen** in the ***shorelands?***

4. What can be done to **better manage** the ***shorelands?***

- ❑ Maintain existing rules regarding the 75 feet setback
- ❑ Easier methods for the public to follow
- ❑ Graphic examples of riparian vegetation and improvements
- ❑ Funding for pilot projects that others may follow
- ❑ Mapping of potential development and significant preservation areas
- ❑ Improvements and vegetation in accord with a plan that will protect the ***shorelands***
- ❑ Discouragement **of** patterns that result in cumulative impacts
- ❑ Protection of valuable existing uses and activities from more intense development
- ❑ Significant incentives to encourage appropriate development in ***shorelands***
- ❑ Nurturing of partnerships and resource sharing arrangements among organizations
- ❑ Outreach and public information programs to encourage and motivate private businesses

What other **methods or tools** could be used to manage the ***shorelands?***

FURTHER COMMENTS:

If **you** are interested in providing additional information, specialized knowledge, or insight, or participating in the Advisory Committee or the other ***shorelands*** activities please indicate your **name, phone number, fax, e-mail,** and/or **mailing address:**

PLEASE FOLD AND MAIL
THIS SELF-ADDRESSED AND STAMPED QUESTIONNAIRE

DRAFT
October 28, 1998

MATANUSKA-SUSITNA BOROUGH

350 East Dahlia Avenue, Palmer, Alaska 99645-6488
Planning and Land Use Department, Code Compliance Division
(907)745-9853 FAX:(907) 745-9876 E-mail: ccb@msb.co.mat-su.ak.us

SHORELANDS MANAGEMENT STUDY
SHORELANDS STEERING COMMITTEE
(INTERIM)

AGENDA

(anticipation of public process and study)

INTRODUCTIONS

APPROVAL OF AGENDA

HANDY MEETING RULES
(consensus of people at meeting)

- One person speaks at a time
- Briefly Identify yourself, interests, and background
- Practice good listening skills
- Do not repeat comments of others
- Keep comments brief and on the subject
- Avoid being judgmental of others
- Share your background and information openly
- Defer to the meeting coordinator
- Seek consensus and avoid group voting and decision-making
- Place objectives of study and borough above special interests

PURPOSE OF PROJECT

Review of staff information and background
Background, input, and questions from others

IDENTIFICATION OF PEOPLE AND INTERESTS TO HELP WITH STUDY

(This is the focus and most important activity of the meeting-see attached memo
The remainder of the agenda is for your information and comment)
Interests
Groups
People

PUBLIC PROCESS AND INFORMATION

Schedule
Questionnaires
Interim Steering Committee
Public Forum
Workshops
Announcements and newsletters

SHORELANDS MANAGEMENT STUDY

Background and literature review
Issues and problems
Goals and objectives
Management Policies and Strategies

A Property Owner's Guide to Shoreline Landscaping in the Matanuska-Susitna Borough

Matanuska-Susitna Borough

- Revised June 2003 -

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A Property Owner's Guide to
SHORELINE LANDSCAPING
in the Matanuska-Susitna Borough

Prepared by:
Department of Planning and Land Use
MATANUSKA-SUSITNA BOROUGH
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Anchorage, Alaska

Wm. Dwayne Adams, Jr., Land Design North,
Anchorage, Alaska

Clinton Pinks, Land Design North,
Anchorage, Alaska

Contents

A Property Owner's Resource Guide to

SHORELINE LANDSCAPING in the Matanuska-Susitna Borough

ALASKA
a land of lakes, rivers, and streams

The Matanuska-Susitna Borough is in an area of Alaska where thousands of lakes and ponds are located, and where hundreds of rivers and streams traverse the valleys. The population of the borough is growing rapidly and changes in our shorelines are increasing.

The natural beauty of the Matanuska-Susitna valley area has been one of the main reasons people make it their home and a destination to recreate. When looking at the development patterns in the valley you immediately notice that a large percentage of the settlement occurrs next to lakes and rivers. These areas are very desirable locations to live by, and to get away to.

A typical lake shore in the Matanuska-Susitna valley. Bluejoint grass, Marsh Fivefinger, Sedge and Willow help provide habitat for birds and fish .

One of the pleasures of living near lakes and streams is the direct access to water for boating, fishing, and swimming. Our lakes and streams provide pleasing views, and a quiet and peaceful environment. Unfortunately, our love of lakes and rivers can upset their natural balance.

RESOURCE GUIDE

a tool to get you started

This guide is provided to help owners of lake front property landscape around the water. Most of the techniques described here are meant to help protect the water quality of lakes, but many of the techniques may also be used successfully along the banks of rivers and streams.

This guide is a tool to get you started. It provides only the basic "how to" information on landscaping. More importantly it includes information on the local resources available to property owners, such as references to materials, local plant nurseries, landscape businesses, and government agencies.

WILDLIFE

Plants provide an important source of shelter and food for many birds and small animals. The publication *Landscaping for Wildlife in Alaska*, recommends providing a variety of seed and berry producing plants. White spruce trees provide seeds for crossbills and pine siskins. Redpolls prefer alder and birch seeds. Bohemian waxwings eat mountain ash berries. Snowshoe hares eat willow shoots, and flying squirrels prefer spruce seeds and mushrooms. Avoid the use of insecticides. Many birds and mammals are attracted to plants where insects live.

BENEFITS

water, land, and wildlife

Shoreline landscaping and low impact land uses can have many benefits.

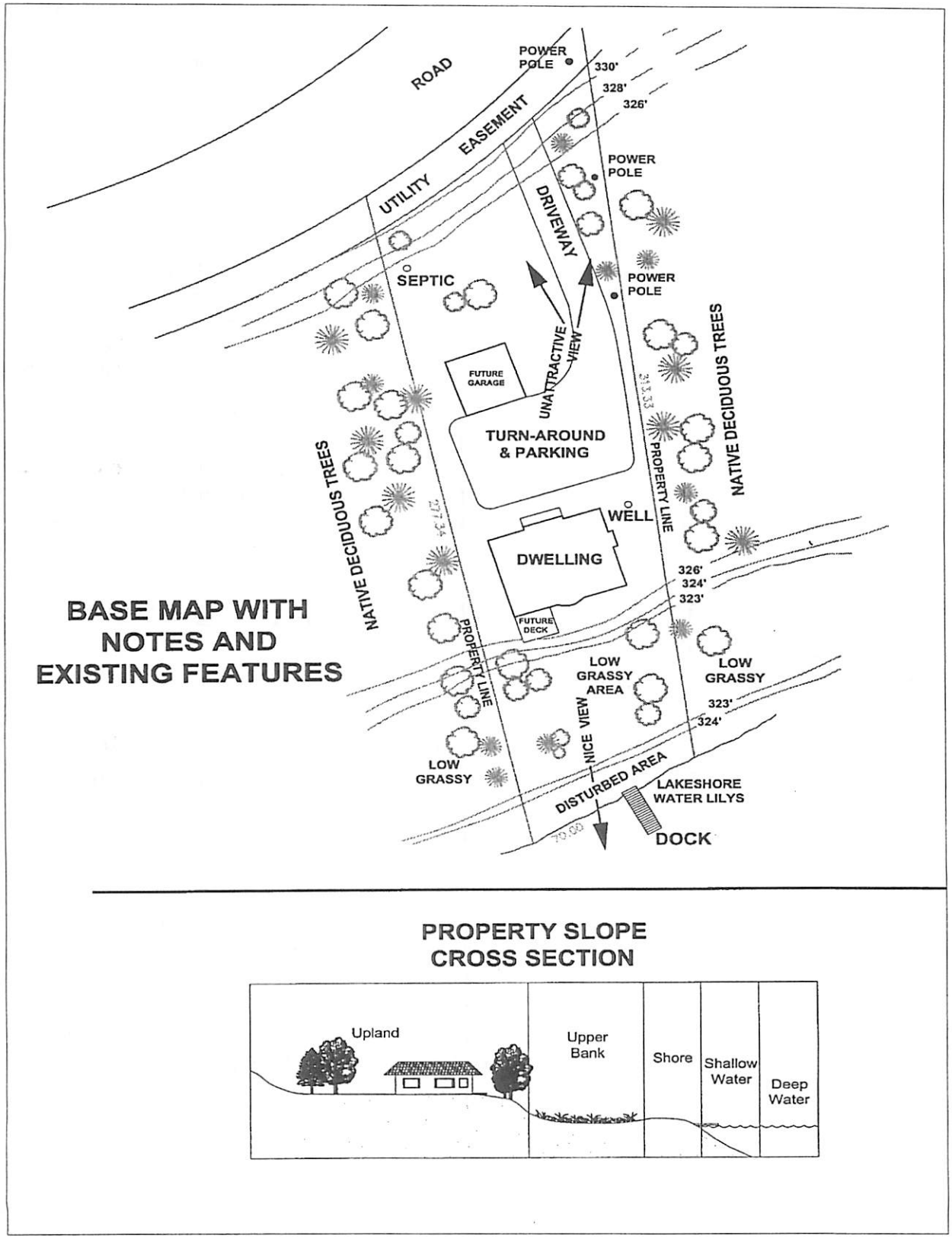
Improve or sustain water quality - Proper shoreline landscaping techniques and development can help to preserve water quality in our lakes and rivers.

Improve property values - Good water quality can increase recreational opportunities of lakes and rivers. Recreational opportunities equate to higher property values around lakes and rivers.

Provide wildlife habitat - Plants and grasses provide food and shelter for various forms of wildlife, including birds, butterflies, waterfowl, fish, and small fur bearing animals.

Provide beauty and privacy - Vegetation along shorelines can provide an attractive buffer between your home and the water. A property owner can leave native grasses, plants, and trees in place, and combine them with non-native species to create color and texture that will respond to the seasons.

Figure 1


BASE MAP WITH NOTES AND EXISTING FEATURES
ROAD
UTILITY EASEMENT
POWER POLE
330'
328'
326'
POWER POLE
DRIVEWAY
SEPTIC
POWER POLE
UNATTRACTIVE VIEW
FUTURE GARAGE
TURN-AROUND & PARKING
NATIVE DECIDUOUS TREES
NATIVE DECIDUOUS TREES
PROPERTY LINE
WELL
DWELLING
326'
324'
323'
FUTURE DECK
PROPERTY LINE
LOW GRASSY AREA
LOW GRASSY
323'
324'
NICE VIEW
LOW GRASSY
DISTURBED AREA
LAKESHORE WATER LILYS
DOCK
PROPERTY SLOPE CROSS SECTION
Upland
Upper Bank
Shore
Shallow Water
Deep Water

Have a goal

A goal is a long range vision of how you want your property to appear and be. Make a list of the changes you have in mind for the property. Such as, moving the dog run further from the house, or pruning some trees to improve the view of the lake, or building a dock.

REGULATIONS
Property owners should contact the appropriate local, state and federal agencies to obtain information and permits prior to undertaking any development near waterbodies.

Check local land use regulations, and subdivision covenants to determine land use restrictions. Permits may be required, and construction may be restricted or prohibited in areas, particularly near shorelines.

Design

Put your ideas down on paper. Sketch where things should go and what changes need to be made, and in what order. Try to draw the ideas that will solve the goals you listed. Consult with the experts. Visit plant nurseries. Use the resources listed in the back of this guide.

Review

Review your design and goal. Does your design meet your goal and the overall goal to improve or protect the water quality? Don't worry about changing your plan. All plans change. Just keep in mind that when you change one aspect of a landscape plan it may affect another part.

INFORMATION
A good source for information about development regulations in the Matanuska-Susitna Borough is the MSB Code Compliance office. Call them at (907) 745-9853.

IMPLEMENTATING YOUR LANDSCAPE PLAN

now the fun begins

Once you have prepared your landscape plan, it is time to think about the details; plants and materials, and the how-to's of when and where to plant. Do you want to place plants in a natural setting or mix native and non-native plants to create a more tamed appearance? Will there be pathways and docks?

UNDERGROUND UTILITY LINES
The local utility companies provide free underground locate services. Call them if you plan to dig on your property.

The plan in Figure 2 shows how the property owners intend to implement their goals. They want some privacy and to lessen the road noise. They want a view of the lake, and want to revegetate a disturbed area near the lakeshore. Most of the native vegetation will be retained. They plan to plant short native shrubs and grasses near the shoreline and taller shrubs and evergreens near the road to create a visual barrier. The barrier will help give the land owner more privacy and reduce noise from the road.

VEGETATIVE BUFFERS

The ideal shoreline vegetative buffer

- **is able to reduce pollutants caused by upland activity**
- **provides a habitat for wildlife and fish**
- **creates a visual barrier**
- **is a mix of plants, such as native grasses, sedges, shrubs and trees**
- **has trees with well developed root systems**

Pathways and docks

Pathways to the water should disturb the shoreline as little as possible. They can be vegetated with grasses, or constructed of gravel or wood. Paths that must cross wetlands should be narrow, elevated and constructed from materials that will allow light to penetrate through them, such as gaps between the boards, or expanded metal. This allows the vegetation to grow under the walkway and water to drain.

Vegetative buffers

It is not possible to create a vegetative buffer that works for all cases. But there are some basics to keep in mind. The vegetation should be able to reduce pollutants caused by upland activities. It is a good idea to have a mix of plants, and to have a relatively flat contour so rain water runs slowly through the root system. Trees with well developed root systems should be part of the buffer as the roots help hold the soils in place.

Pruning and thinning

It is difficult to duplicate native shoreline plants. So if your shoreline is undisturbed it may be best to leave as much of the native vegetation as possible. You might want to consider just thinning or pruning the native vegetation. Some native plants like alder and willow can be pruned to produce a thicker tamer appearance. Thinning out certain trees or plants can promote the growth of the plants you choose to leave.

Pruning gives plants a more vigorous appearance. Cutting back the branches of shrubs to a dormant bud will promote more branching. It forces the buds behind the growing point of the branch to grow new stems.

Native plant and tree collection

Before you consider digging native plants it is very important to have the land owner's permission, and to know the plant's growing requirements. Frequently plants are damaged when removed from their natural setting. The plants natural environment is difficult to copy, so you may be better off collecting seeds and cuttings in order to grow native plants.

TRANSPLANTING
Some of Alaska's native plants are easily transplanted for landscaping projects. Other plants can be harvested for their seeds or cuttings.

When transplanting wild or native trees it is easier to dig up small trees. Deciduous trees should be transplanted when they are dormant in the spring or fall. Evergreens are best transplanted in the early fall so roots will be established before the winter freeze. Dig around and under the tree to free the roots. A good rule of thumb is to dig outside the outermost branches. Wrap the root ball in a burlap bag or similar material to prevent it from falling apart. Move it carefully and replant it in a prepared hole. Be sure to harvest only what you need, and always leave some of the plant species for natural propagation. You will be more successful if you transplant during the cool hours of the day. Handle the plants carefully. Provide the plants shelter from the wind and sun when moving them from one location to another. Water the plants during and after replanting, air in the root mass can kill a plant.

Growing native plants by seed and cuttings

This method of stem cutting can be used to grow willow and balsam poplar. According to the Cooperative Extension Service stems from willow and poplar can be stuck directly into the soil, and they take root rapidly. Actively growing plants, preferably younger trees, should be used for the stem stock. For the do-it-yourselfer this method of planting native trees and shrubs is inexpensive and fairly easy.

A good reference for planting native vegetation from cuttings is the Cooperative Extensions Services *Revegetative Guide for Conservation Use in Alaska.* It includes a reference to native plant characteristics as they relate to soil conditions, and the best method for growing plant species. In addition, a new publication, titled, *Streambank Revegetation and Protection Guide*, is now available from

EROSION CONTROL

techniques to hold the dirt in place

If your property is flat, you can usually seed or plant and then perform regular watering and fertilizing. But if you're working on slopes or where water is eroding a shoreline you have to devise some way of holding in seed and plants to allow them time to root.

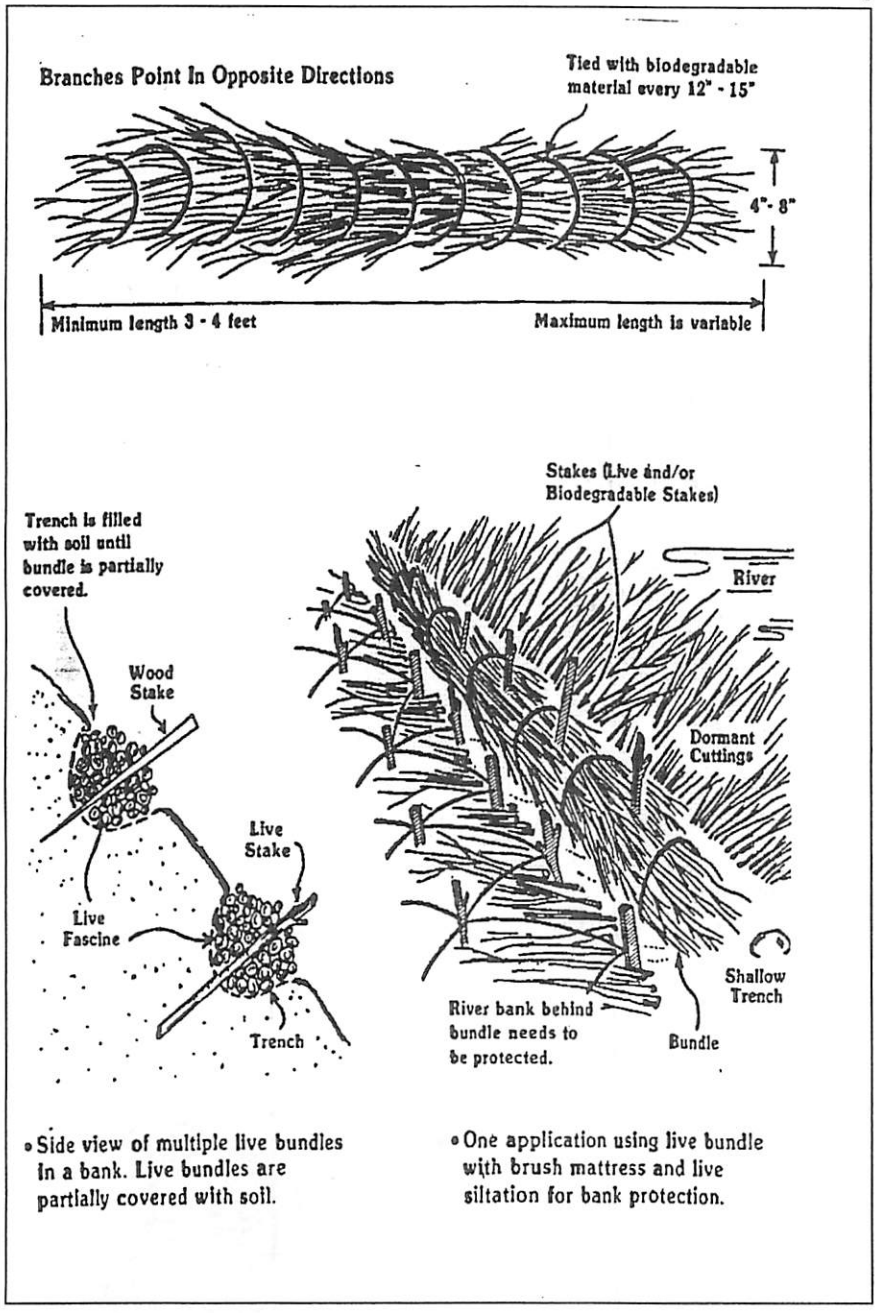


Figure 3

Source: *Streambank Revegetation & protection Guide*
(Reprinted with permission)
Alaska Department of Fish and Game
Alaska Department of Natural Resources

Stabilizing slopes and revegetating

There are several techniques for holding newly planted slopes and shorelines. The right method depends on the site and the type of plants you are trying to establish. If slopes are not steep, susceptible to run-off, or wave action, transplanting small shrubs or establishing grasses will work without added expense and materials.

A common practice in Alaska is to use bundles of dormant plant cuttings, such as willow. Bundles are formed by tying together several dormant branches 1/2 to 1 1/2 inches in diameter. The bud tips of the branches are oriented in opposite directions to create a uniform diameter bundle. Bundles should be four or more inches in diameter and at least three to four feet in length. The bundle is tied together with biodegradable twine as shown in *Figure 3*.

PERMITS
Development in or near water requires permits. Call the Matanuska-Susitna Borough's Code compliance office for information before you begin construction or clearing.
(907) 745-9853

Wave breaking devices

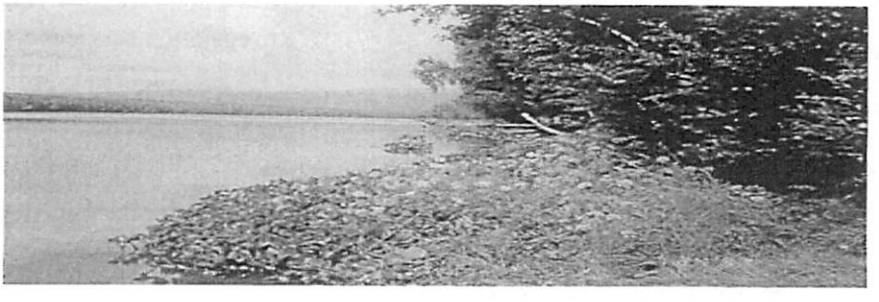
Wave breaking devices protect the shore from fast moving water and allow the establishment of new plants. Temporary breakwaters are placed in the water just beyond the planted areas to stop wave action similar to that shown in *Figure 4*. Brush or other natural fibers, such as straw bales or coconut husk (coir) logs may be used. The barriers are placed waterside of the plants and are anchored with stakes. Bundled brush is probably the most practical and inexpensive for use in a do-it-yourself project. These will hold the water back temporarily, create an area for sediments to gather and allow your plantings to establish themselves. Eventually, the temporary structures will break down.

AVAILABLE RESOURCES

we have many from which to choose

There are an abundance of local plant experts in the Matanuska-Susitna valley area. This may be due to our agricultural history and rich soils. In any case, there are people readily available to help you. Consult with the local nurseries, landscapers, tree growers, Alaska Plant Materials Center, or check the publications at the University of Alaska Cooperative Extension Service.

There is also a wide variety of landscaping books that can be purchased or borrowed that will help you plant in uplands areas. Publications that specialize in planting near ponds and bogs are also available. Commercial publications specific to landscaping near lakes and streams are rare. Check with the university, or local state and federal agencies listed in the back of this publication. They are valuable resources for information on native plants, and landscaping plants that are suited for our climate.



LOCAL, STATE & FEDERAL AGENCIES IN THE MATANUSKA-SUSITNA BOROUGH	
AGENCY	**SERVICES/COMMENTS**
Matanuska-Susitna Borough Planning and Land Use Department Code Compliance Division Palmer 745-9853	For information regarding land use, permitting, and regulations.
State of Alaska, Dept. of Natural Resources, Division of Agriculture Plant Materials Center Palmer 745-4469	For plant and seed information. Revegetation recommendations including Streambank Revegetation.
University of Alaska - Fairbanks Cooperative Extension Service Palmer 745-3360	Information on plants, Revegetation guides
US Government, Department of Agriculture Natural Resources & Conservation Service Wasilla 373-6492	Plant & Tree information, soils classification
State of Alaska Department of Fish & Game Palmer 746-6300	Permit information
US Army Corp of Engineers, Wetlands Elmendorf AFB 753-2712	Permit information

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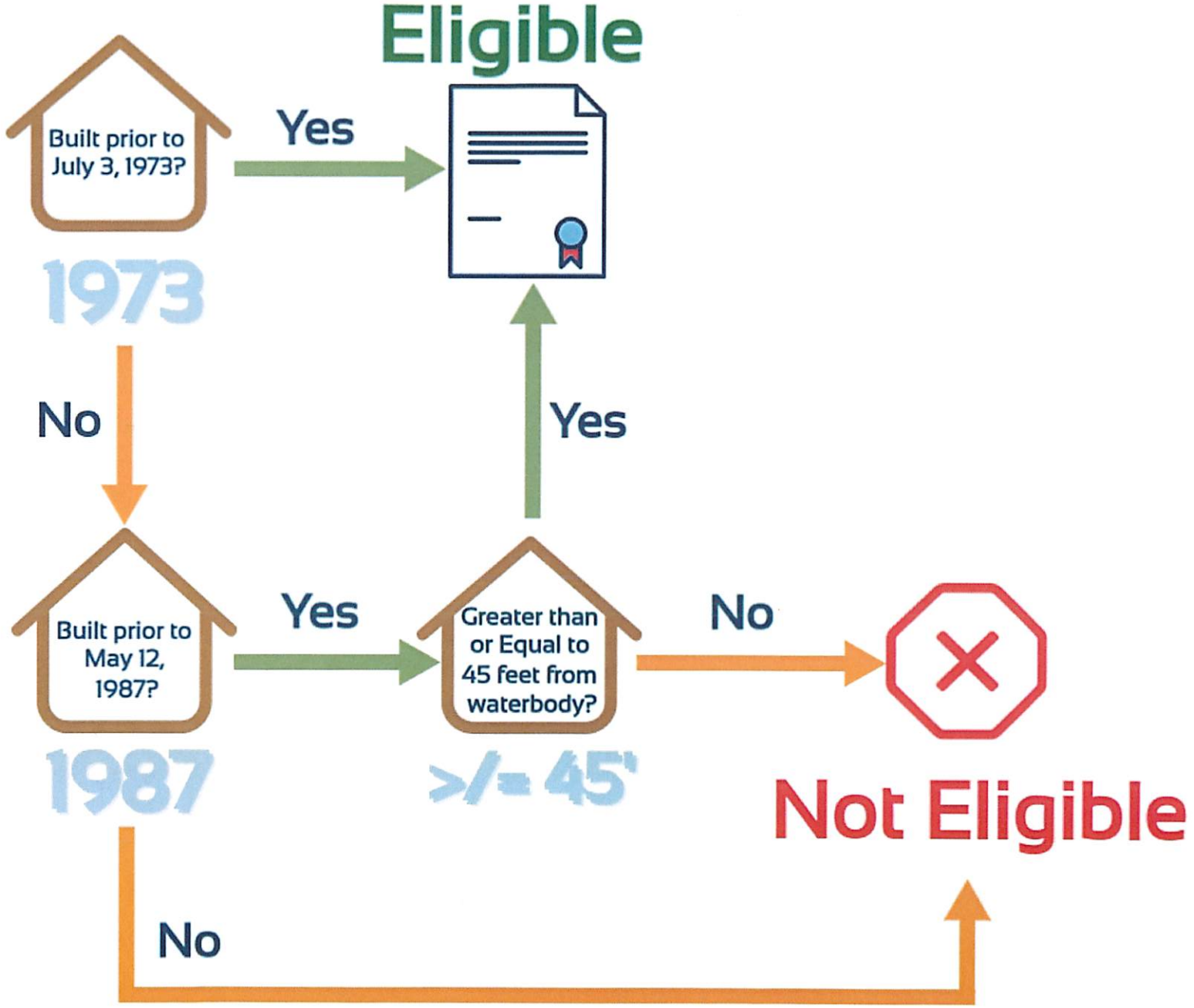
HOW CAN YOU HELP PROTECT WATER QUALITY?

Voluntary Best Management Practices For Development around Waterbodies

Best Management Practice	Rationale
Maintain the natural shoreline or riparian habitat. • Preserve a minimum 75 foot wide buffer of continuous, undisturbed native vegetation along at least 50% of the parcel's shoreline or stream bank. • Along remaining 50% of shoreline, limit vegetation removal to what is necessary to accommodate paths, docks, or other limited development.	Protects water quality by reducing nutrient loading in lakes and minimizing temperature changes to stream environments. Provides flood control and reduces erosion and sedimentation. Protects fish and wildlife habitat by providing cover, nest sites and spawning areas.
Minimize impervious surfaces on shoreline lots. • Limit to maximum of 25% of lot area. • Minimize as much as possible within 75 feet of the water's edge.	Impervious surfaces such as pavement, roof tops, and compacted soil allow runoff to enter waterbodies more readily. Runoff in residential or commercial areas may contain phosphorus and other nutrients that lead to oxygen deficits and algal blooms.
Avoid adding sand beaches or adding fill material to lakeshore, stream banks or wetland areas.	Sand or fill reduces water clarity, is harmful to aquatic life and may contain phosphorus that enriches waterbodies.
Adhere to the state of Alaska's 100 foot waterbody separation for septic systems and outhouses, and keep septic systems in good working order.	Bacterial contamination from poorly maintained or leaking septic systems or outhouses is a human health concern. Nutrients from poorly functioning septic systems or outhouses are waterbody pollutants.
Use landscaping practices that will reduce degradation of waterbodies, including: • Test soils to see if fertilizers are needed and use sparingly. • Design a smaller lawn to reduce fertilizer use. • Use native species that grow well without fertilizer. • Avoid fertilizer use completely within 50 feet of the water's edge.	Lawns are often over-fertilized, which leads to harmful levels of nutrients in the water. Lawns are not as effective as natural vegetation for pollution filtration. Lawns do not provide protective cover for fish and wildlife populations that are part of the waterbody system.
Maintain at least a 75 foot distance from the water's edge for: • Additional permanent or accessory buildings. • Driveways, roads and other impervious surfaces. • Livestock or dog quarters or yards. • Manure or compost piles. • Long-term vehicle or equipment storage. Exceptions may include boathouses, floatplane hangers, marinas, piers and docks that need to be closer than 75 feet to serve their purposes.	Protects human health and water quality by reducing contamination from animal waste, compost, fuels, sediment and other substances that pollute waterbodies.

Mat-Su Borough Ordinance 05-023 established voluntary measures that property owners can use to protect the quality of our lakes, streams and wetlands. For more information, contact the Matanuska-Susitna Borough, Department of Planning and Land Use at 745-9851.


Eligible
Built prior to July 3, 1973?
Yes
1973
No
Yes
Built prior to May 12, 1987?
Yes
Greater than or Equal to 45 feet from waterbody?
No
1987
>/= 45'
Not Eligible
No

Waterbody Setbacks