CHAPTER 6

ENVIRONMENT

CONTENTS

		Page #
Article 10-6A	Environmental Ordinance	6-2
Article 10-6B	Critical Areas	6-25
Article 10-6C	Wellhead Protection	6-67
Article 10-6D	Shoreline Management	6-68
Article 10-6E	Environmental Conservation	6-69
Article 10-6F	Flood Damage Prevention Ordinance	6-72

Article 10-6A — Environmental Ordinance

Sections:

10-6A-1 Authority

10-6A-2 General Requirements

10-6A-3 Categorical Exemptions and Threshold Determinations

10-6A-4 Environmental Impact Statement (EIS)

10-6A-5 Commenting

10-6A-6 Using Existing Environmental Documents

10-6A-7 SEPA and Agency Decisions

10-6A-8 SEPA and Agency Definitions

10-6A-9 SEPA Categorical Exemptions

10-6A-10 Agency Compliance

10-6A-11 SEPA Exemption Levels Matrix & Summary of SEPA Process

10-6A-12 Forms

10-6A-1 Authority

The City of Liberty Lake adopts this ordinance under the State Environmental Policy Act (SEPA), section 43.21C.120 RCW, and the SEPA rules, section 197-11-904 WAC.

This ordinance contains the City of Liberty Lake's SEPA procedures and policies.

The intent of this ordinance is to support uniform environmental review requirements between the City of Liberty Lake, Spokane County, Spokane Regional Health District, and Spokane County Air Pollution Control Authority.

The SEPA rules, chapter 197-11 WAC, must be used in conjunction with this ordinance.

10-6A-2 General Requirements

A. Purpose. This section contains the basic requirements that apply to the SEPA process. The City of Liberty Lake adopts the following sections of Chapter 197-11 of the Washington Administrative Code by reference:

WAC:

197-11-040 DEFINITIONS

197-11-050 LEAD AGENCY

197-11-055 TIMING OF THE SEPA PROCESS

197-11-060 CONTENT OF ENVIRONMENTAL REVIEW

197-11-070 LIMITATIONS ON ACTIONS DURING SEPA PROCESS

197-11-080 INCOMPLETE OR UNAVAILABLE INFORMATION

197-11-090 SUPPORTING DOCUMENTS

197-11-100 INFORMATION REQUIRED OF APPLICANTS

197-11-158 GMA PROJECT REVIEW—RELIANCE ON EXISTING PLANS, LAWS, AND REGULATIONS

197-11-210 SEPA/GMA INTEGRATION

197-11-220 SEPA/GMA DEFINITIONS

197-11-228 OVERALL SEPA/GMA INTEGRATION PROCEDURES

197-11-230 TIMING OF AN INTEGRATED GMA/SEPA PROCESS

197-11-232 SEPA/GMA INTEGRATION PROCEDURES FOR PRELIMINARY PLANNING, ENVIRONMENTAL ANALYSIS, AND EXPANDED SCOPING

197-11-235 DOCUMENTS

197-11-238 MONITORING

197-11-250 SEPA/MODEL TOXICS CONTROL ACT INTEGRATION

197-11-253 SEPA LEAD AGENCY FOR MTCA ACTIONS

197-11-256 PRELIMINARY EVALUATION

197-11-259 DETERMINATION OF NONSIGNIFICANCE FOR MTCA REMEDIAL ACTIONS

197-11-262 DETERMINATION OF SIGNIFICANCE AND EIS FOR MTCA REMEDIAL ACTIONS

197-11-265 EARLY SCOPING FOR MTCA REMEDIAL ACTIONS

197-11-268 MTCA INTERIM ACTIONS

B. Designation of Responsible Official.

1. For public proposals, the head (administrative official) of the department making the proposal shall be the responsible official. For private proposals, the head administrative official) of the department with primary responsibility for approving the permits and licenses for the proposal shall be the responsible official. When multiple officials have permitting authority, the assignment of responsibility shall be reached by agreement.
2. For all proposals for which the City of Liberty Lake is the lead agency, the responsible official shall make the threshold determination, supervise scoping and preparation of any required environmental impact statement (EIS), and perform any other functions assigned to the "lead agency" or "responsible official" by those sections of the SEPA rules that are adopted by reference in Section 10-6A-2, subsection "A" above.
3. The City of Liberty Lake shall retain all documents required by the SEPA rules (Chapter 197-11 WAC) and make them available in accordance with Chapter 42.17 RCW.

C. Lead Agency Determination and Agency Responsibilities.

1. The department within the City of Liberty Lake receiving an application for or initiating a proposal that involves a nonexempt action shall determine the lead agency for that proposal under sections 197-11-050, 197-11-253, and 197-11-922 through 197-11- 940 WAC unless the lead agency has been previously determined, or the department is aware that another

department or agency is in the process of determining the lead agency.

2. When the City of Liberty Lake is the lead agency for a proposal, the department receiving the application shall determine the responsible official who shall supervise compliance with the threshold determination requirements, and if an EIS is necessary, shall supervise preparation of the EIS.

3. When the City of Liberty Lake is not the lead agency for a proposal, all departments of the City of Liberty Lake shall use and consider, as appropriate, either the DNS or the final EIS of the lead agency in making decisions on the proposal. No City of Liberty Lake department shall prepare or require preparation of a DNS or EIS in addition to that prepared by the lead agency unless required under section 197-11-600 WAC. In some cases, the City of Liberty Lake may conduct supplemental environmental review under section 197-11-600 WAC.

4. If the City of Liberty Lake or any of its departments receives a lead agency determination made by another agency that appears inconsistent with the criteria of section 197-11-253, or sections 197-11-922 through 197-11-940 WAC, it may object to the determination. Any objection must be made to the agency originally making the determination and resolved within fifteen (15) days of receipt of the determination or the City of Liberty Lake must petition the Department of Ecology for a lead agency determination under section 197-11-946 WAC within the fifteen (15) day time period. Any such petition on behalf of the City of Liberty Lake may be initiated by the potential responsible official.

5. Departments of the City of Liberty Lake are authorized to make agreements as to lead agency status or shared lead agency duties for a proposal under sections 197-11-942 and 197-11-944 WAC, provided that the responsible official and any department that will incur responsibilities as the result of such agreement approve the agreement.

6. Any department making a lead agency determination for a private project shall require sufficient information from the applicant to identify which other agencies have jurisdiction over the proposal (that is, which agencies require nonexempt licenses).

D. Other Timing and Additional Considerations Applicable to the SEPA Process.

1. The following time limits shall apply when there is no established agency procedure.

   a. Threshold determinations - When the responsible official requires further information from the applicant or consultation with other agencies with jurisdiction:

      i. The responsible official should request such further information within seven (7) days of receiving an adequate application and completed environmental checklist;

      ii. The responsible official shall wait no longer than fourteen (14) days for a consulted agency to respond;

      iii. The responsible official should complete the threshold determination within seven (7) days of receiving the requested information from the applicant or the consulted agency.

   b. When the responsible official must initiate further studies, including field investigations, to obtain the information to make the threshold determination, the responsible official should complete the studies within thirty (30) days of receiving an adequate application and a completed checklist.

   c. The responsible official shall complete threshold determinations on actions where the applicant recommends in writing that an EIS be prepared within seven (7) days.

2. For nonexempt proposals, the DNS or Final Environmental Impact Statement (FEIS) for the

proposal shall accompany the department's staff recommendation to any advisory or final action body.

3. If the only action is a decision on a building permit or other license that requires detailed project plans and specifications, the City of Liberty Lake may provide the applicant with the opportunity for environmental review under SEPA before requiring the applicant to submit such detailed project plans and specifications, however, generally the City utilizes a consolidated project permit process.

   a. The City of Liberty Lake may specify the amount of detail needed from the applicant for such early environmental review, consistent with sections 197-11- 100 and 197-11-335 WAC.

   b. This subsection does not preclude an applicant from preliminary discussions or exploration of ideas and options prior to commencing formal environmental review.

10-6A-3 Categorical Exemptions and Threshold Determinations

A. Purpose and Adoption By Reference. This section contains the rules for deciding whether a proposal has a "probable significant adverse environmental impact" requiring an environmental impact statement (EIS) to be prepared. This section also contains rules for evaluating the impacts of proposals not requiring an EIS. The City of Liberty Lake adopts the following sections by reference, as supplemented in this section.

WAC:

197-11-300 PURPOSE OF THIS PART

197-11-305 CATEGORICAL EXEMPTIONS

197-11-310 THRESHOLD DETERMINATION REQUIRED

197-11-315 ENVIRONMENTAL CHECKLIST

197-11-330 THRESHOLD DETERMINATION PROCESS

197-11-335 ADDITIONAL INFORMATION

197-11-340 DETERMINATION OF NONSIGNIFICANCE (DNS)

197-11-350 MITIGATED DNS

197-11-355 OPTIONAL DNS PROCESS

197-11-360 DETERMINATION OF SIGNIFICANCE (DS)/INITIATION OF SCOPING

197-11-390 EFFECT OF THRESHOLD DETERMINATION

B. Flexible Thresholds for Categorical Exemptions. In addition to those exemptions identified in Section 10-6A-9 (Categorical Exemptions), the City of Liberty Lake establishes the following exempt levels for minor new construction under section 197-11-800(1)(c) WAC, based on local conditions.

1. For residential dwelling units in section 197-11-800(1)(b)(i) WAC: up to 20 dwelling units.
2. For agricultural structures in section 197-11-800(1)(b)(ii) WAC: up to 20,000 square feet.
3. For office, school, commercial, recreational, service, or storage buildings in section 197-11-800(1)(b)(iii) WAC: up to 12,000 square feet and up to 40 parking spaces.

4. For parking lots in section 197-11-800(1)(b)(iv) WAC: up to 40 parking spaces.
5. For landfills and excavations in section 197-11-800(1)(b)(v) WAC: up to 500 cubic yards.

C. Categorical Exemptions - Applicability.

1. If a proposal fits within any of the provisions in Section 10-6A-9 (Categorical Exemptions) and this section, the proposal shall be categorically exempt from the threshold determination requirements (section 197-11-720 WAC), except when the proposal is a segment of a proposal that includes:
   a. a series of actions, physically or functionally related to each other, some of which are categorically exempt and some of which are not; or
   b. a series of exempt actions that are physically or functionally related to each other, and that together may have a probable significant adverse environmental impact in the judgment of an agency with jurisdiction. If so, that agency shall be the lead agency unless the agencies with jurisdiction agree that another agency should be the lead agency. Agencies may petition the department of ecology to resolve disputes (section 197-11-946 WAC).

   For such proposals, the agency or applicant may proceed with the exempt aspects of the proposals, prior to conducting environmental review, provided the requirements of section 197-11-070 WAC are met. See Section 10-6A-11 for an informational matrix of exempt and nonexempt activities.
2. The lead agency is not required to document that a proposal is categorically exempt. The lead agency may note on an application that a proposal is categorically exempt or place such a determination in the agency's files.

D. Use of Exemptions.

1. Each department within the City of Liberty Lake that receives an application for a license or, in the case of governmental proposals, the department initiating the proposal, shall determine whether the license and/or the proposal is exempt. The department's determination that a proposal is exempt shall be final and not subject to administrative review. If a proposal is exempt, none of the procedural requirements of this section applies to the proposal. The City of Liberty Lake shall not require completion of an environmental checklist for an exempt proposal.
2. In determining whether a proposal is exempt, the department shall make certain the proposal is properly defined and shall identify the governmental licenses required (section 197-11-060 WAC). If a proposal includes exempt and nonexempt actions, the department shall determine the lead agency, even if the license application that triggers the department's consideration is exempt.
3. If a proposal includes both exempt and nonexempt actions, the City of Liberty Lake may authorize exempt actions prior to compliance with the procedural requirements of this section, except that the City of Liberty Lake shall not authorize:
   a. any nonexempt action;
   b. any action that would limit the choice of alternatives for environmental review;
   c. any action that would have a probable significant adverse environmental impact.
4. A responsible official may withhold approval of an exempt action that would modify the environment, when such modification would result in a probable significant adverse impact or

would limit the choice of alternatives for environmental review.

5. A responsible official may withhold approval of an exempt action that would lead to an applicant making substantial financial expenditures when there is some doubt that the entire proposal (i.e. subdivision) may not be approved.

E. Environmental Checklist.

1. A completed environmental checklist shall be filed prior to or at the same time as an application for a permit, license, certificate, or other approval not exempted in this section; except a checklist is not needed if the City of Liberty Lake and the applicant agree an EIS is required, SEPA compliance has been completed, or SEPA compliance has been initiated by another agency. The checklist shall be in the form provided by the City, which shall be based on the form in section 197-11-960 WAC with questions potentially being added or modified.

2. For private proposals, the City of Liberty Lake will require the applicant to complete the environmental checklist. For public proposals, the department initiating the proposal shall complete the environmental checklist for that proposal.

3. The City of Liberty Lake may require that City staff, and not the private applicant, complete all, or part of, the environmental checklist for a private proposal if the applicant has provided inaccurate information on previous proposals or on proposals currently under consideration, or if the City of Liberty Lake has technical information on a question or questions that is unavailable to the private applicant. The applicant shall reimburse the City of Liberty Lake for time and effort so expended.

4. During the review of the environmental checklist, the staff of the City of Liberty Lake may make such changes or additions to the environmental checklist as are necessary to make it an accurate statement. Alternatively, the staff may return the checklist to the applicant for revisions and/or additional information.

5. For projects submitted under an approved planned action under section 197-11-168 WAC, the City of Liberty Lake shall use its existing environmental checklist form or may modify the environmental checklist form as provided in section 197-11-315 WAC. The modified environmental checklist form may be prepared and adopted along with, or as part of, a planned action ordinance, or developed after the ordinance is adopted. In either case, a proposed modified environmental checklist form must be sent to the Department of Ecology to allow at least a thirty (30) days review prior to use.

F. Mitigated Determination of Nonsignificance (DNS).

1. As provided in this section and in section 197-11-350 WAC, the responsible official may issue a DNS based on conditions attached to the proposal by the responsible official or on changes to or clarification of the proposal made by the applicant.

2. An applicant may request in writing early notice of whether a DS is likely under section 197-11-350 WAC. The request must:

   a. follow submission of a complete permit application and environmental checklist for a nonexempt proposal for which the department is lead agency; and

   b. precede the agency's actual threshold determination for the proposal.

3. The responsible official or a designee shall respond in writing to the request for early notice within fourteen (14) days unless otherwise agreed to. Response must:

   a. state whether the City of Liberty Lake currently considers issuance of a DS likely, and if

so, indicate the general or specific area(s) of concern leading the City of Liberty Lake to consider a DS; and

b. state that the applicant may change or clarify the proposal to mitigate the indicated impacts, revising the environmental checklist and/or permit application as necessary to reflect the changes or clarifications.

4. As much as possible, the lead agency should assist the applicant with identification of impacts to the extent necessary to formulate mitigation measures.

5. When an applicant submits a changed or clarified proposal, along with a revised or amended environmental checklist, the responsible official shall base the threshold determination on the changed or clarified proposal and should make the determination within fourteen (14) days of receiving the changed or clarified proposal unless otherwise established by agency procedures.

   a. If the responsible official indicated specific mitigation measures in the response to the request for early notice and the applicant changed or clarified the proposal to include those specific mitigation measures, the responsible official shall issue and circulate a DNS pursuant to section 197-11-340(2) WAC.

   b. If the responsible official indicated areas of concern but did not indicate specific mitigation measures that would allow the issuance of a DNS, the responsible official shall make the threshold determination, issuing a DNS or DS as appropriate.

   c. The applicant's proposed mitigation measures (clarifications, changes, or conditions) must be in writing and must be specific. For example, proposals to "control noise" or "prevent stormwater runoff" are inadequate, whereas proposals to "muffle machinery to X decibel" or "construct 200-foot stormwater retention pond at Y-location" are adequate.

   d. Mitigation measures which justify issuance of a mitigated DNS may be incorporated in the DNS by reference to agency staff reports, studies, or other documents.

6. A mitigated DNS is issued either under section 197-11-340(2) WAC requiring a fourteen (14) day comment period unless otherwise established by agency procedure and public notice pursuant to Section 10-6A-5, subsection "B", or under section 197- 11-355 WAC, which may require no additional comment period beyond the comment period on the notice of application.

7. Mitigation measures incorporated in the mitigated DNS shall be deemed conditions of approval of the permit decision and may be enforced in the same manner as any term or condition of the permit or enforced in any manner specifically prescribed by the City of Liberty Lake.

8. If the City of Liberty Lake’s tentative decision on a permit or approval does not include mitigation measures that were incorporated in a mitigated DNS for the proposal, the City of Liberty Lake should evaluate the threshold determination to assure consistency with section 197-11-340(3)(a) WAC (withdrawal of DNS).

9. The City of Liberty Lake’s written response under this section shall not be construed as a determination of significance. In addition, preliminary discussion of clarifications or changes to a proposal, as opposed to a written request for early notice, shall not bind the City of Liberty Lake to consider the clarifications or changes in its threshold determination.

10-6A-4 Environmental Impact Statement (EIS)

A. Purpose and Adoption By Reference. This section contains the rules for preparing environmental impact statements. The City of Liberty Lake adopts the following sections by reference, as supplemented by this section:

WAC:

197-11-400 PURPOSE OF EIS

197-11-402 GENERAL REQUIREMENTS

197-11-405 EIS TIMING

197-11-408 SCOPING

197-11-410 EXPANDING SCOPING

197-11-420 EIS PREPARATION

197-11-425 STYLE AND SIZE

197-11-430 FORMAT

197-11-435 COVER LETTER OR MEMO

197-11-440 EIS CONTENTS

197-11-442 CONTENTS OF EIS ON NONPROJECT PROPOSALS

197-11-443 EIS CONTENTS WHEN PRIOR NONPROJECT EIS

197-11-444 ELEMENTS OF THE ENVIRONMENT

197-11-448 RELATIONSHIP OF EIS TO OTHER CONSIDERATIONS

197-11-450 COST/BENEFIT ANALYSIS

197-11-455 ISSUANCE OF DEIS

197-11-460 ISSUANCE OF FEIS

B. Preparation of EIS – Additional Consideration.

1. Preparation of the Draft and Final EIS (DEIS and FEIS) and a Draft and Final Supplemental EIS (SEIS) is the responsibility of the lead agency under the direction of the responsible official. No matter who participates in the preparation of the EIS, it is the EIS of the City of Liberty Lake. The responsible official shall be satisfied that the EIS complies with the provisions of this section and Chapter 197-11 WAC before issuing the EIS.
2. The DEIS and FEIS or draft and final SEIS shall be prepared by the City of Liberty Lake staff, the applicant, or its agent, or by an outside consultant retained by either an applicant or the lead agency.
    a. For public projects, the responsible official shall determine when an outside consultant should prepare the EIS based on available staff, expertise, resources, and public interest to adequately assess and evaluate the impacts of the projects.
    b. For projects initiated by a private applicant, the preparation of an EIS shall be under the direction of the responsible official. The responsible official shall notify the applicant of the procedures for an EIS preparation, including approval of the DEIS, FEIS, and SEIS prior to distribution. All costs of preparing the EIS shall be borne by the applicant.

3. If a person other than the lead agency is preparing the EIS, the responsible official shall:
    a. assure that the EIS is prepared in a responsible manner and with appropriate methodology;
    b. be responsible for scoping and preparation of a scoping report pursuant to section 197-11-408 WAC (the responsible official may include consultants in the scoping process);
    c. coordinate any areas of research and examination to be undertaken, as well as the organization of the resulting document;
    d. meet with the persons preparing the EIS and review draft sections of the EIS to assure the completeness, accuracy, and objectivity of the EIS;
    e. allow any person preparing an EIS access to all relevant public records of the lead agency, pursuant to Chapter 42.17 RCW (Public Disclosure and Public Records Law);
    f. assist in obtaining any information on file with another agency that is needed by the person preparing the EIS.
4. The lead agency may require an applicant to provide information the lead agency does not possess, including specific investigations. However, the applicant is not required to supply information that is not required under this ordinance or that is being requested from another agency. (This does not apply to information the lead agency may request under another ordinance or statute.)
5. Any person, firm, or corporation assisting in the preparation of an EIS for private projects shall have expertise and experience in preparing environmental impact statements and shall be approved in writing by the responsible official before participating in the EIS process. The lead agency may create and maintain an EIS list of Qualified Consultants to assist in determining the expertise and experience of consultants using, but not limited to, the following procedures.
    a. Annually or biannually placing a legal notice in the City's official newspaper requesting Statement of Qualifications (SOQ). Interested consultants will be required to submit an application package for consideration to be placed on the list.
    b. The City of Liberty Lake will review the SOQs and place those consultant firms who are determined to meet the minimum qualifications on the list. Those qualifications include, but are not limited to:
        i. possessing a thorough and comprehensive knowledge of the procedural and substantive requirements of SEPA and related regulations;
        ii. possessing adequate technical and administrative capacity to produce EIS documents and/or associated technical documents;
6. The private applicant shall compensate the lead agency for its administrative costs incurred with the development, production, and processing of the EIS, in accordance with the adopted City Fee Schedule.

C. Additional Elements To Be Covered In An EIS.

1. The table of contents shall include the list of elements of the environment (section 197-11-444 WAC), indicating those elements or portions of elements that do not involve significant adverse impacts (reference section 197-11-440[3][b] WAC).
2. The lead agency may include, at its discretion, in an EIS or its appendix, the analysis of any impact relevant to the agency's decision, whether or not the impact is an environmental one. The inclusion of such analysis may or may not be based upon comments received during the

scoping process. The provision for combining documents may be used (section 197-11-640 WAC). The EIS shall comply with the format requirements of sections 197-11-400 through 197-11-500 WAC. The decision whether to include such information and the adequacy of any such additional analysis shall not be used in determining whether an EIS meets the requirements of SEPA.

3. If the lead agency chooses to include a cost/benefit analysis in an EIS, such analysis shall be consistent with section 197-11-450 WAC.

10-6A-5 Commenting

A. Adoption By Reference. This section contains rules for consulting, commenting, and responding on all environmental documents under SEPA, including rules for public notice and hearings. The City of Liberty Lake adopts the following sections by reference, as supplemented in this section.

WAC:

197-11-500 PURPOSE OF THIS PART

197-11-502 INVITING COMMENT

197-11-504 AVAILABILITY AND COST OF ENVIRONMENTAL DOCUMENTS

197-11-508 SEPA REGISTER

197-11-510 PUBLIC NOTICE

197-11-535 PUBLIC HEARINGS AND MEETINGS

197-11-545 EFFECT OF NO COMMENT

197-11-550 SPECIFICITY OF COMMENTS

197-11-560 FEIS RESPONSE TO COMMENTS

197-11-570 CONSULTED AGENCY COSTS TO ASSIST LEAD AGENCY

B. Public Notice.

1. Whenever possible, the lead agency shall integrate the public notice requirement of this section with existing notice procedures for the lead agency's nonexempt permit(s) or approval(s) required for the proposal.

2. Whenever the Spokane Regional Health District or the Spokane County Air Pollution Control Authority issues a DNS under section 197-11-340(2) WAC or a DS under section 197-11-360(3) WAC, public notice shall be given by publishing notice in a newspaper of general circulation in the city or general area where the proposal is located.

3. Whenever the City of Liberty Lake issues a DNS under section 197-11-340(2) WAC or a DS under section 197-11-360(3) WAC, public notice shall be given as follows.

   a. If public notice is required for a nonexempt license by other regulations, that notice shall state whether a DS or DNS has been issued and when comments are due.

   b. If an environmental document is issued concurrently with the Notice of Application, the public notice requirements as set forth in Article 10-4B of this Code will suffice to meet the public notice requirements in section 197-11- 510(1) WAC.

   c. If no public notice is otherwise required for the permit or approval, the lead agency shall

give notice of the DNS or DS as provided for in section 197-11- 510 WAC and locally adopted rules and regulations.

d. If a DS is issued under section 197-11-360(3) WAC, the lead agency shall state the scoping procedure for the proposal in the DS, as required pursuant to section 197-11-408 WAC.

4. If a DNS is issued using the Optional DNS process, the public notice requirements for a notice of application as set forth in Article 10-4B of this Code, as supplemented by the requirements in section 197-11-355 WAC, will suffice to meet the public notice requirements in section 197-11-510(1)(b) WAC.

5. Whenever the lead agency issues a DEIS under section 197-11-455(5) WAC or an SEIS under section 197-11-620 WAC, notice of the availability of these documents shall be given by the following:

a. Indicating the availability of the DEIS in any public notice required for the nonexempt license subsequently published after the issuance of the DEIS and prior to the first public hearing regarding a nonexempt license.

b. Selecting one or more of the following notification methods.

i. Posting the property for site specific proposals pursuant to the administrative procedures for the underlying action.

ii. Publishing a legal notice in a newspaper of general circulation in the city or general area where the proposal is located.

iii. Notifying of public or private groups, which have expressed an interest in a certain proposal, or in the type of proposal being considered.

iv. Notifying the news media.

v. Placing notices in appropriate regional, neighborhood, ethnic, or trade journals.

vi. Publishing notice in the City of Liberty Lake newsletters and/or sending notice to agency mailing lists (either general lists or lists for specific proposals for subject areas).

6. The lead agency may require an applicant to complete the public notice requirements for the proposal at his or her expense or otherwise may charge a fee sufficient to cover the lead agency's entire cost of meeting the public notice requirements.

C. Designation Of Official To Perform Consulted Agency Responsibilities For the City of Liberty Lake.

1. The Zoning Administrator shall be responsible for preparation of written comments for an agency in response to a consultation request prior to a threshold determination, participation in scoping, and reviewing a DEIS.

2. The Zoning Administrator shall be responsible for the City of Liberty Lake's compliance with section 197-11-550 WAC whenever such department is a consulted agency and is authorized to develop operating procedures that will ensure that responses to consultation requests are prepared in a timely fashion and include data from all appropriate departments of the City.

10-6A-6 Using Existing Environmental Documents

A. Purpose and Adoption By Reference. This section contains rules for using and supplementing

existing environmental documents prepared under SEPA or the National Environmental Policy Act (NEPA) for an agency's own environmental compliance. The City of Liberty Lake adopts the following sections by reference.

WAC:

197-11-164 PLANNED ACTIONS—DEFINITION AND CRITERIA

197-11-168 ORDINANCES OR RESOLUTIONS DESIGNATING PLANNED ACTIONS—PROCEDURES FOR ADOPTION

197-11-172 PLANNED ACTIONS—PROJECT REVIEW

197-11-600 WHEN TO USE EXISTING ENVIRONMENTAL DOCUMENTS

197-11-610 USE OF NEPA DOCUMENTS

197-11-620 SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT — PROCEDURES

197-11-625 ADDENDA — PROCEDURES

197-11-630 ADOPTION — PROCEDURES

197-11-635 INCORPORATION BY REFERENCE — PROCEDURES

197-11-640 COMBINING DOCUMENTS

10-6A-7 SEPA and Agency Decisions

A. Purpose and Adoption By Reference. This section contains rules (and policies) for SEPA's substantive authority, such as decisions to mitigate or reject proposals as a result of SEPA. This section also contains procedures for appealing SEPA determinations to agencies or the courts. The City of Liberty Lake adopts the following sections by reference.

WAC:

197-11-650 PURPOSE OF THIS PART

197-11-655 IMPLEMENTATION

197-11-660 SUBSTANTIVE AUTHORITY AND MITIGATION

197-11-680 APPEALS

B. Substantive Authority.

1. The policies and goals set forth in this section are supplementary to those in the existing authorization of the City of Liberty Lake, Spokane County, Spokane Regional Health District, and Spokane County Air Pollution Control Authority.
2. The City of Liberty Lake may attach conditions to a permit or approval for a proposal so long as:
   a. such conditions are necessary to mitigate specific probable adverse environmental impacts identified in environmental documents prepared with regard to the license and pursuant to this ordinance; and
   b. such conditions are in writing; and
   c. the mitigation measures included in such conditions are reasonable and capable of being

accomplished; and

d. the City of Liberty Lake has considered whether other local, state, or federal mitigation measures applied to the proposal are sufficient to mitigate the identified impacts; and

e. such conditions are based on one or more policies in Section 10-6A-7, subsection "B" and cited in the license or other decision document.

3. The City of Liberty Lake may deny a permit or approval for a proposal on the basis of SEPA provided that:

   a. a finding is made that approving the proposal would result in probable significant adverse environmental impacts that are identified in a FEIS or final SEIS prepared pursuant to this ordinance; and

   b. a finding is made that there are no reasonable mitigation measures capable of being accomplished that are sufficient to mitigate the identified impact; and

   c. the denial is based on one or more policies identified in Section 10-6A-7, subsection "B" and identified in writing in the decision document.

4. The City of Liberty Lake adopts the following policies as the basis for the exercise of substantive authority, pursuant to this section.

   a. the City of Liberty Lake shall use all practicable means consistent with other essential considerations of state policy to improve and coordinate plans, functions, programs, and resources to the end that the State and its citizens may:

      i. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

      ii. assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

      iii. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

      iv. preserve important historic, cultural, and natural aspects of our national heritage;

      v. maintain, wherever possible, an environment which supports diversity and variety of individual choice;

      vi. achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and,

      vii. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

   b. The City of Liberty Lake recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

   c. The City of Liberty Lake, for the purposes of section 43.21C.060 RCW and section 197-11-660(a) WAC, adopts by reference the applicable local, state, and federal policies, plans, rules, and regulations, as amended. All amendments by the City of Liberty Lake pursuant to section 197-11-902 WAC are exempt from fees for amendment.

5. Except for permits and variances issued pursuant to chapter 90.58 RCW (the Washington State Shorelines Management Act) and rules promulgated thereto, appeals of decisions or actions conditioned or denied on the basis of SEPA by a non-elected official shall be

appealable in accordance with Section 10-6A-7, subsection "C" below.

C. Appeals.

1. The City of Liberty Lake establishes the following appeal procedures under section 43.21C.060, 43.21C.075, and 43.21C.080 RCW and section 197-11-680 WAC. Persons considering either administrative or judicial appeal of any decision that involves SEPA are advised to read these statutory and administrative rule provisions.
2. Appeal of the intermediate steps under SEPA (e.g., lead agency determination, scoping, draft EIS adequacy) shall not be allowed.
3. Appeals of SEPA procedures shall be limited to review of a final threshold determination (DS, DNS or Mitigated DNS) or Final EIS. These appeals may occur prior to the City of Liberty Lake's final decision on a proposed action.
4. Only one administrative appeal of a threshold determination or of the adequacy of an EIS is allowed; successive administrative appeals within the City are not allowed. This limitation does not apply to administrative appeals before another agency. This limitation also does not apply to closed record appeals authorized in subsection C-5 below.
5. A closed record appeal is allowed to the City Council of any decision by the City of Liberty Lake Hearing Examiner conditioning or denying a proposal under authority of SEPA, if the Hearing Examiner's decision on the underlying governmental action is subject to a closed record appeal to the City Council. The appeal shall be consolidated with any appeal of the underlying governmental action.
6. Except as provided in subsection C-5 and C-7, any allowed appeals of procedural and substantive determinations under SEPA shall be consolidated with a hearing on, or appeal of, the underlying governmental action in a single open record hearing before the City of Liberty Lake Hearing Examiner. The hearing or appeal shall be one at which the City of Liberty Lake Hearing Examiner will render a decision on the proposed action. For example, an appeal of the adequacy of an EIS must be consolidated with a hearing on or appeal of the City of Liberty Lake's decision on the proposed action, if both proceedings are allowed in the City's procedures. If the City of Liberty Lake's procedures do not provide for a hearing on or appeal of the underlying governmental action, such agency shall not hold a SEPA administrative appeal, except as allowed in subsection C-7 below.
7. The following appeals of SEPA procedural or substantive determinations shall not be consolidated with a hearing on or appeal of the underlying action:
    a. An appeal of a determination of significance (DS).
    b. An appeal of a procedural determination made by the City of Liberty Lake when it is the project proponent or is funding a project and chooses to conduct its review under SEPA, including any appeals of its procedural determinations, prior to submitting an application for a project permit. Subsequent appeals of substantive determinations by an agency with jurisdiction over the proposed project shall be allowed under the SEPA appeal procedures of the agency with jurisdiction.
    c. An appeal of a procedural determination made by the City of Liberty Lake on a non-project action.
    d. An appeal where the underlying action is a ministerial permit decision that does not require a public hearing.
8. For threshold determinations issued prior to a decision on a project action, any administrative

appeal allowed under Section 10-6A-7, subsection "C" shall be filed within fourteen (14) days after the determination has been made and is appealable. Any administrative appeal of a procedural or substantive determination under SEPA issued at the same time as the decision on the project action shall be filed within fourteen (14) days after notice of the decision has been made and is appealable. In order to allow public comment on a DNS prior to requiring an administrative appeal to be filed, this appeal period shall be extended for an additional seven (7) days if the appeal is of a DNS for which public comment period is required under the provisions of this ordinance or chapter 197-11 WAC. Nothing in this subsection alters the requirements of Section 10-6A-7, subsections "C-6 and C-7".

9. Procedural determinations made by the responsible official shall be entitled to substantial weight in any appeal proceeding.
10. For any appeal under this section, the City of Liberty Lake shall provide for the preparation of a record for use in any subsequent appeal proceedings, which record shall consist at a minimum the following:
    a. Findings and conclusions.
    b. Testimony under oath.
    c. A taped, electronically recorded, or written transcript.
11. If an administrative appeal of determinations relating to SEPA is available under the procedures of Section 10-6A-7, subsection "C", that procedure must be used before any person may seek judicial review of any SEPA issue that could have been reviewed under such procedures.
12. Judicial appeals of procedural and substantive compliance with SEPA must comply with section 43.21C.075 RCW and section 197-11-680(4) WAC.
    a. The City of Liberty Lake shall give official notice under section 197-11-680(5) WAC of the date and place for commencing a judicial appeal if there is a time limit established by statute or such agency's regulations for commencing a judicial appeal of the underlying governmental action.
    b. Pursuant to section 43.21C.080 RCW, notice of any action taken by the City of Liberty Lake may be publicized by such agency or the applicant for, or the proponent of, such action. The form of the notice shall substantially conform to the forms provided by the City.

10-6A-8 SEPA and Agency Definitions

A. Purpose and Adoption By Reference. This section contains uniform usage and definitions of terms under SEPA. The City of Liberty Lake adopts the following sections by reference, as supplemented by Article 10-1C of this Code.

WAC:

197-11-700 DEFINITIONS

197-11-702 ACT

197-11-704 ACTION

197-11-706 ADDENDUM

197-11-708 ADOPTION

197-11-710 AFFECTED TRIBE

197-11-712 AFFECTING

197-11-714 AGENCY

197-11-716 APPLICANT

197-11-718 BUILT ENVIRONMENT

197-11-720 CATEGORICAL EXEMPTION

197-11-721 CLOSED RECORD APPEAL

197-11-722 CONSOLIDATED APPEAL

197-11-724 CONSULTED AGENCY

197-11-726 COST/BENEFIT ANALYSIS

197-11-728 COUNTY/CITY

197-11-730 DECISION MAKER

197-11-732 DEPARTMENT

197-11-734 DETERMINATION OF NONSIGNIFICANCE (DNS)

197-11-736 DETERMINATION OF SIGNIFICANCE (DS)

197-11-738 EIS

197-11-740 ENVIRONMENT

197-11-742 ENVIRONMENTAL CHECKLIST

197-11-744 ENVIRONMENTAL DOCUMENT

197-11-746 ENVIRONMENTAL REVIEW

197-11-750 EXPANDED SCOPING

197-11-752 IMPACTS

197-11-754 INCORPORATION BY REFERENCE

197-11-756 LANDS COVERED BY WATER

197-11-758 LEAD AGENCY

197-11-760 LICENSE

197-11-762 LOCAL AGENCY

197-11-764 MAJOR ACTION

197-11-766 MITIGATED DNS

197-11-768 MITIGATION

197-11-770 NATURAL ENVIRONMENT

197-11-772 NEPA

197-11-774 NONPROJECT

197-11-775 OPEN RECORD HEARING

197-11-776 PHASED REVIEW

197-11-778 PREPARATION

197-11-780 PRIVATE PROJECT

197-11-782 PROBABLE

197-11-784 PROPOSAL

197-11-786 REASONABLE ALTERNATIVE

197-11-788 RESPONSIBLE OFFICIAL

197-11-790 SEPA

197-11-792 SCOPE

197-11-793 SCOPING

197-11-794 SIGNIFICANT

197-11-796 STATE AGENCY

197-11-797 THRESHOLD DETERMINATION

197-11-799 UNDERLYING GOVERNMENTAL ACTION

B. Additional Definitions. In addition to those definitions contained within sections 197-11-700 through 197-11-799 WAC, see Article 10-1C.

10-6A-9 SEPA Categorical Exemptions

A. Adoption By Reference. The City of Liberty Lake adopts by reference the following rules for categorical exemptions, as supplemented in this section, to include Section 10-6A-3, subsection B (Flexible thresholds), Section 10-6A-3, subsection D (Use of exemptions), and Article 10-6B (Critical areas). See Section 10-A-11 for an example list of exempt and nonexempt activities.

WAC:

197-11-800 CATEGORICAL EXEMPTIONS

197-11-880 EMERGENCIES

197-11-890 PETITIONING DOE TO CHANGE EXEMPTIONS

B. Certification of Emergencies. The responsible official shall certify on a case-by-case basis those actions which meet the conditions prescribed in section 197-11-880 WAC and are declared emergencies.

10-6A-10 Agency Compliance

A. Purpose and Adoption By Reference. This section contains rules for the City of Liberty Lake compliance with SEPA, including rules for charging fees under the SEPA process, designating critical areas, listing agencies with environmental expertise, selecting the lead agency, and applying these rules to current agency activities. The City of Liberty Lake adopts the following sections by reference.

WAC

197-11-900 PURPOSE OF THIS PART

197-11-902 AGENCY SEPA POLICIES

197-11-916 APPLICATION TO ONGOING ACTIONS

197-11-920 AGENCIES WITH ENVIRONMENTAL EXPERTISE

197-11-922 LEAD AGENCY RULES

197-11-924 DETERMINING THE LEAD AGENCY

197-11-926 LEAD AGENCY FOR GOVERNMENTAL PROPOSALS

197-11-928 LEAD AGENCY FOR PUBLIC AND PRIVATE PROPOSALS

197-11-930 LEAD AGENCY FOR PRIVATE PROJECTS WITH ONE AGENCY WITH JURISDICTION

197-11-932 LEAD AGENCY FOR PRIVATE PROJECTS REQUIRING LICENSES FROM MORE THAN ONE AGENCY WHEN ONE OF THE AGENCIES IS A COUNTY/CITY

197-11-934 LEAD AGENCY FOR PRIVATE PROJECTS REQUIRING LICENSES FROM A LOCAL AGENCY, NOT A COUNTY/CITY, AND ONE OR MORE STATE AGENCIES

197-11-936 LEAD AGENCY FOR PRIVATE PROJECTS REQUIRING LICENSES FROM MORE THAN ONE STATE AGENCY

197-11-938 LEAD AGENCIES FOR SPECIFIC PROPOSALS

197-11-940 TRANSFER OF LEAD AGENCY STATUS TO A STATE AGENCY

197-11-942 AGREEMENTS ON LEAD AGENCY STATUS

197-11-944 AGREEMENTS ON DIVISION OF LEAD AGENCY DUTIES

197-11-946 DOE RESOLUTION OF LEAD AGENCY DISPUTES

197-11-948 ASSUMPTION OF LEAD AGENCY STATUS

B. Critical areas. The rules and regulations set forth in the City of Liberty Lake Critical Areas Ordinance (Article 10-6B of the City Development Code), as amended, and the supplemental maps designate the location of environmentally sensitive areas within the City of Liberty Lake. Proposals that will be located within critical areas are to be treated no differently than other proposals under this article. A threshold determination shall be made for all such actions, and an EIS shall not be automatically required for a proposal merely because it is proposed for location in a critical area.

C. Fees. The City of Liberty Lake exercises the option presented in section 197-11-914 WAC to recover all or a substantial portion of the costs of SEPA compliance as regards a private proposal as established in the adopted City Fee Schedule.

10-6A-11 SEPA Exemption Levels Matrix & Summary of SEPA Process

A. SEPA Exemption Levels Matrix. The following matrix serves for informational purposes only and should not be interpreted as law. Departments may administratively update this matrix for their

own information. See Washington Administrative Code (WAC) chapter 197-11, and the provisions set forth in this article for specific SEPA exemption rules and regulations.

ACTIVITY	EXEMPT	NON-EXEMPT
Activities in Critical Areas		X [2]
Activities of Fire and Law Enforcement - exempt construction	X	
Additions to Buildings - below the flexible thresholds	X	
Adoption of State Building Codes	X	
Adoption of Noise Ordinances	X	
Agricultural Buildings (less than 20,000 sq. feet)	X	
Annexation Into a City	X	
Binding Site Plan (BSP)		X
Class I, II, and III Forest Practice Permits / Regulations	X	
Closure of Schools (plan)	X	
Demolitions to Buildings - below the flexible thresholds	X	
Demolitions to Buildings of Historical Significance		X
Dredging		X
Dwelling Units (less than 20 units)	X	
Grants of Franchise by Agencies to Utilities	X	
Hydrological Measuring Devises	X	
Installation, Construction, Relocation of Utilities, Except the Following: 1. Communication Towers or Relay Stations 2. Stormwater, Water and Sewer Lines (greater than 8 inches) 3. Electrical Facilities and Lines (greater than 55,000 volts)	X [1]	
Issuance, Renewal, Revision of Air Operating Permit	X	
Landfills and Excavations (less than 500 cubic yards)	X	
License for Discharge to Air		X
License for Discharge to Water		X
Microcell Attached To Structure (no residence or school on-site)	X	
Minor Road Repair (including pedestrian and bicycle facilities)	X	
Minor Repair or Replacement of Structures	X	
Open Burning	X	
Office, School, Commercial, Recreational, Service, and Storage Buildings (less than 12,000 sq. feet and up to 40 parking spaces)	X	
Parking Lots (less than 40 parking spaces)	X	
Personal Wireless Service Antennas Attached To A Structure (no residence or school on-site and located in a Commercial or Industrial Zone)	X	

Personal Wireless Service Tower (less than 60 feet in a Commercial or Industrial Zone)	X	
Plat		X
Proposal or Adoption of Rules, Regulations, Resolutions, Ordinances, or Plans Relating To Procedures and Contains No Standards	X	
Reconstruction / Maintenance - Shoreline Protection Measures		X
Recreational Site Development (less than 12 campsites)	X	
Repair / Rebuilding of Dams, Dikes, and Reservoirs		X
Repair, Remodeling, and Maintenance of Existing Structures	X [1]	
Replacement of Utilities / Utility Lines	X [3]	
Rezone		X
Sale, Transfer, Exchange, or Lease of Land	X	
Short Plats or Short Subdivisions	X [1]	
Short Plats (within land previously platted)		X
Signs and Signals	X	
Special Use Permit - project meets flexible thresholds	X	
Survey and Boundary Markers	X	
Timber Harvest		X
Transit Stops	X	
Underground Tanks (less than 10,000 gallons)	X	
Vacation of Streets and Roads	X	
Variances (not including change in use or density)	X	
Variances (under the Clean Air Act)	X	
Water Rights and Structures (less than 50 cfs of surface water for irrigation)	X	
Water Rights and Structures (1 cfs or 2250 gpm of ground water)	X	
Water Quality Certifications	X	
Watershed Restoration Projects Pursuant to a Restoration Plan	X	

1. Applies to land not covered by water.
2. Under section 197-11-305 WAC, each County/City may adopt provisions to exclude exemptions listed in 197-11-800 for those sites listed in Critical Areas.
3. Some utility replacements are non-exempt. See WAC for specifics (i.e. replacement of transmission line for natural gas is not exempt).

B. SEPA Process.

Is SEPA Required?	Is the entire proposal defined?	WAC 197-11-060
	Is there an agency "action"?	WAC 197-11-704
	Is the action "categorically exempt"?	10-6A-3, subsection B, 10-6A-3, subsection D, 10-6A-9, subsection A, and 10-6A-10, subsection B
	Has SEPA already been completed?	WAC 197-11-164, and 10-6A-6, subsection A, and 10-6A-7, subsection B
Who is lead agency?	Identify the "lead agency."	10-6A-2
Are there likely to be impacts?	Review the checklist and identify likely significant adverse environmental impacts.	WAC 197-11-330
Are there existing documents that analyze the impacts?	Identify documents that analyze probable impacts of the proposal.	WAC 197-11-600 and 330(2)(a)
Can impacts be mitigated?	Identify mitigation required by development regulations, and other local and state laws.	WAC 197-11-158, and 10-6A-3, subsection F
	Is the applicant willing to change the proposal to reduce impacts?	10-6A-3, subsection F
	Consider using SEPA substantive authority for other impacts not adequately addressed.	10-6A-7, subsection B
After application of identified mitigation, is the proposal likely to have any significant adverse environmental impact?	If not, issue a determination of nonsignificance (which may include mitigation measures).	WAC 197-11-340, 350, and 355
	If yes, issue a determination of significance, and either include an adoption notice or begin the EIS process.	WAC 197-11-360 and 10-6A-4
How is SEPA used in decision making?	Mitigation under SEPA must be included as permit conditions, or in changes to permit applications for the proposal. Projects may be denied if identified significant adverse impacts cannot be mitigated.	10-6A-7, subsection B

C. SEPA Involvement Requirements.

DOCUMENT	Comment Period	Public Notice	Distribution	WAC
Determination of Non-Significance (DNS)	14 days (may be required)	Yes (if comment period required)	Yes (if comment period required)	See 197-11-340(2) for criteria on whether a comment period is required
Mitigated DNS	14 days	Yes	Yes	197-11-340 and 197-11-350
Optional DNS Process Notice w/ NOA	Combined w/ NOA (14 - 30 days)	Yes	Yes	197-11-355
DNS Issued After NOA	Optional 14 days	Yes (if comment period is given)	Yes	
DNS Integrated w/ GMA Planning Document	Combined w/ GMA Document (14 - 60 days)	Yes	Yes	197-11-230(1) and (4)
Modified DNS	No	No	Yes	197-11-340(2)(f)

DNS After Withdrawal of a DS	14 days	Yes	Yes	197-11-360(4) and 197-11-340(2)(iv)
DS With Scoping Notice	21 days (up to 30 days for expanded scoping)	Yes	Yes	197-11-360, 197-11-408, and 197-11-410
DS / Scoping Notice w/ NOA	Combined w/ NOA (14 - 30 days)	Yes	Yes	197-11-408
Draft Environmental Impact Statement (DEIS)	30 days (possible 15-day extension)	Yes	Yes	197-11-455
DEIS Integrated With GMA Planning Document	Combined w/ GMA Document (30 - 60 days)	Yes	Yes	197-11-230(1) and (4)
Supplemental DEIS	30 days (possible 15-day extension)	Yes	Yes	197-11-620(1) and 197-11-455
Final EIS	No, but a 7-day waiting period is required before agency action	No	Yes	197-11-460
Final Supplemental EIS	No, but a 7-day waiting period is required before agency action	No	Yes	197-11-620(1) and 197-11-460
Final EIS Integrated w/ GMA Planning Document	No comment or waiting period	No	Yes	197-11-230(5)
Adoption Notice w/ DNS	14 days (may be required)	Yes (if comment period required)	Yes (if comment period required)	197-11-340(2) and 197-11-630
Adoption Notice w/ DS	No, but a 7-day waiting period is required before agency action	No	Yes	197-11-630(3)
Addendum to a DNS	No	No	Encouraged	197-11-625(5)
Addendum to an EIS	No	No	Encouraged, (may be required)	See 197-11-625 for criteria requiring distribution

Agencies may extend any comment period for their own proposals, WAC 197-11-050(7).

10-6A-12 Forms

A. Adoption by references. The City of Liberty Laker adopts the following forms for use in carrying out the local SEPA procedures. These forms may be amended administratively provided there is concurrency between the City of Liberty Lake, Spokane County, Spokane Regional Health District and Spokane County Air Pollution Control Authority.

1. Liberty Lake Environmental Checklist
2. Liberty Lake Adoption Notice
3. Liberty Lake Determination of Nonsignificance (DNS/ Optional DNS)
4. Liberty Lake Mitigated Determination of Nonsignificance (MDNS)

5. Liberty Lake Determination of Significance and Scoping Notice (DS)
6. Liberty Lake Notice of Assumption of Lead Agency Status
7. Liberty Lake Notice of Action
8. Liberty Lake Notice of Availability

The above referenced forms are available through the City of Liberty Lake.

Article 10-6B — Critical Areas

Sections:

10-6B-1 **General Provisions**

10-6B-2 **Emergency Permits & Reasonable Use Exceptions**

10-6B-3 **Wetlands**

10-6B-4 **Fish & Wildlife Habitat Conservation Areas**

10-6B-5 **Geologically Hazardous Areas**

10-6B-6 **Critical Aquifer Recharge Areas**

10-6B-7 **Additional Resources**

10-6B-8 **Incentives**

10-6B-1 General Provisions

A. Purpose. The purpose of this article is to implement the overall critical areas goals, and the specific goals and policies for wetlands, fish and wildlife habitat, geo-hazard areas, and critical aquifer recharge areas contained in the City of Liberty Lake Comprehensive Plan, Chapter 9 Natural Environment. The specific goals for wetlands, fish and wildlife habitat, geo- hazard areas, and critical aquifer recharge areas are listed below. Furthermore, it is expressly the purpose of this article to protect the health, safety, and welfare of the general public.

1. Wetlands.
    a. Ensure “no net loss” of wetland functions, value, and quantity as a result of land use activities and establish a long-term goal of measurable gain of wetlands function and value;
    b. Establish wetland management programs that include identification of wetlands and a classification system; and
    c. Protect and enhance wetlands so that they are able to perform their natural functions and maintain their beneficial values.
2. Fish and Wildlife Habitat Conservation Areas.
    a. Identify fish and wildlife habitat conservation areas and their ecosystems. Recognize the multiple values of fish and wildlife habitat conservation areas and educate people as to these values.
    b. Protect, maintain, and improve critical fish and wildlife habitat conservation areas and habitats of local importance through a variety of methods including public ownership of the most critical areas and incentives for privately owned land.
    c. The City of Liberty Lake shall strive to minimize fragmentation of habitat by protecting important fish and wildlife areas and open space; and by interconnecting corridors to form a continuous network of fish and wildlife habitat and ecosystems with adjacent areas.
    d. The City of Liberty Lake shall strive to ensure that priority fish and wildlife species as identified by the Washington Department of Fish and Wildlife and species of local importance do not become imperiled due to land use changes, habitat alteration, and other

human activities.

3. Geologically Hazardous Areas.
    a. Development should be discouraged in geologically hazardous areas unless it can be demonstrated that a hazard area can be developed consistent with public health and safety. Development permits may be conditioned to mitigate certain hazards.
    b. Geologically hazardous areas may be used as open space for recreation, rangeland, forest, wildlife habitat, and other uses as appropriate.
4. Critical Aquifer Recharge Areas.
    a. Prevent degradation of groundwater quality in Liberty Lake area aquifers.
    b. Protect groundwater quality from development impacts.
    c. Mitigate the effects of natural or unnatural events that lower aquifer water quality below minimum state standards.
    d. Secure adequate water quantity for the residents of the City of Liberty Lake without artificially over-allocating available resources to any single customer or group of customers.
    e. Provide public information programs for land users to demonstrate how to protect critical aquifer recharge areas from degradation.
    f. Consistently enforce regulations, effectively monitor compliance, and provide regulatory incentives to protect critical aquifer recharge areas.
    g. Regularly update critical aquifer recharge area protection measures so they are effective, enforceable, and equitable.
5. General purpose of this article.
    a. To protect the public health, safety, and welfare by preserving, protecting, restoring, and managing through the regulation of development and other activities within wetland, fish and wildlife habitat conservation areas, geologically hazardous areas, and critical aquifer recharge areas;
    b. To recognize wetlands, fish and wildlife habitat conservation areas and geologically hazardous areas and critical aquifer recharge areas as important natural resources which provide significant environmental functions and values including: vital importance to critical fish and wildlife habitat, surface and ground water quality, aquifer recharge, flood control, shoreline anchorage and erosion control, scientific research and education, open space, aesthetic values, historic and cultural preservation, passive recreation and contribute to quality of life currently enjoyed by citizens of Liberty Lake;
    c. To maintain consistency with state and federal protective measures;
    d. To avoid duplication and over-regulation by limiting regulatory applicability to those developments and activities with significant impacts;
    e. To identify and protect wetlands, fish and wildlife habitat conservation areas, geologically hazardous areas, and critical aquifer recharge areas without violating any citizen's constitutional rights;
    f. To alert appraisers, assessors, owners and potential buyer or lessees of property to the development limitation within wetlands, fish and wildlife habitat conservation areas, and geologically hazardous areas;

g. To prevent degradation of critical aquifer recharge areas.

B. Intent.

1. The intent of these regulations is to avoid, or in appropriate circumstances, to minimize, rectify, reduce, or compensate for impacts arising from land development and other activities affecting wetlands, fish and wildlife habitat conservation areas, geologically hazardous areas, and critical aquifer recharge areas; and to maintain and enhance the biological and physical functions and values of these areas.
2. Development shall not impact wetlands, however, if impacts do occur, mitigation may be implemented to achieve no net loss of wetlands in terms of acreage, function, and value.
3. It is recognized that land development will not always be compatible with preservation of fish and wildlife and their habitats. Some wildlife will be eliminated as development occurs. It is the intent of these regulations to preserve wildlife when possible through thoughtful planning and consideration of wildlife needs.
4. It is the intent of these regulations to allow development in geo-hazard areas only when hazards can be mitigated to protect the public health, safety, and general welfare.
5. In addition, the intent of these regulations is to recognize that property rights and public services are an essential component of our legal and economic environment. Where such rights and public services are seriously compromised by the regulations contained in this article, impacts may be permitted provided there is appropriate mitigation.

C. Applicability. This article shall apply to all areas within the City of Liberty Lake and the obligation to comply with any requirements within the scope and provisions of this article is with the owner of the property or land. No action shall be undertaken by any person which impacts critical aquifer recharge areas or results in any alteration of a wetland, fish and wildlife habitat or geologically hazardous area as defined in this Code except in conformance with this article. Uses and activities listed in subsection "D" below are allowed in wetlands, fish and wildlife habitat areas, geologically hazardous areas, and their buffer areas only if:

1. The use or activity is in compliance with the requirements of this article, and
2. The use or activity is in compliance with all other applicable provisions of the City Code. Uses and activities listed in listed in subsection "D" below shall conform with requirements in this article for protecting critical aquifer recharge areas

D. Uses and Activities Within Wetlands, Fish and Wildlife Habitats, and Geo-Hazard Areas. (*some uses may not be permitted by the underlying zone, see Chapter 2 of this Code*)

USES AND ACTIVITIES	**Wetlands & Buffers**	**Habitats**	**Geo-Hazard Areas**
Agriculture Building	N	L	L
Agriculture Ditch Maintenance	L	P	P
Agriculture--Existing, On-going	L	P	P
Aquatic Vegetation Management	L	P	NA
Building Construction, Institutional, Commercial, Industrial, Recreational	N	L	L
Conservation Activities	P	P	P

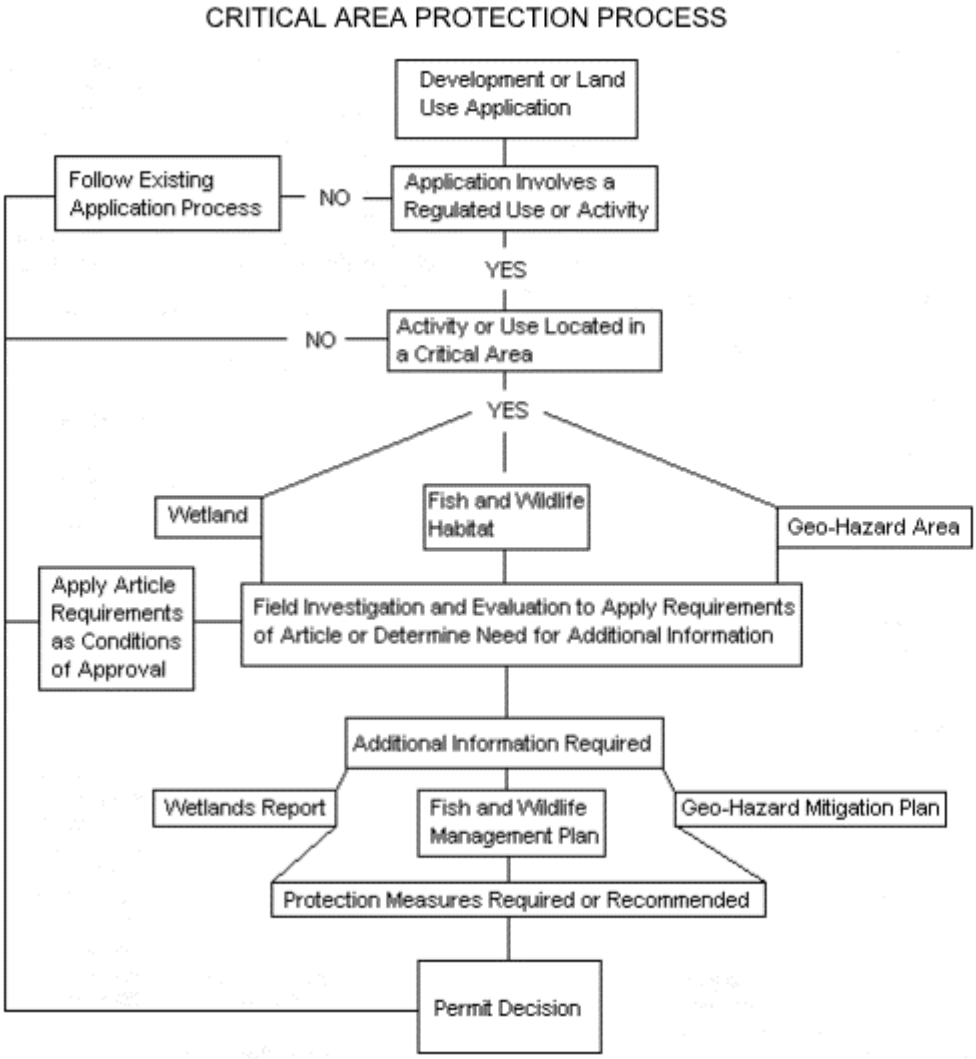
Diseased Vegetation Removal, Vegetation Removal Within 30N of Existing Structure	L	P	P
Dredging	N	L	NA
Excavation, Filling, Grading (less than 30 cubic yards)	N	L	L
Excavation, Filling, Grading (greater than 30 cubic yards)	N	L	L
Floating Docks, Boat Mooring, Buoys	L [1]	P	P
Golf Course	L [1]	L	L
Harvesting of Wild Crops	P	P	P
Lines Utility Transmission	L [1]	L	L
Noxious Weed Control	P	P	P
Open Space, Natural Area	P	P	P
Parks, Camps	L [1]	L	L
Passive Recreation, Scientific Research	P	P	P
Pedestrian/Bike Trail	L 1	L	P
Radio/TV Towers	N	L	L
Road Repair and Maintenance	L	P	P
Single Family Private Access Street/Driveway	N	L	L
Single Family Residence and Accessory Structures and Decks	N	L	L
Street, Expansion of Existing Corridor Street or Bridge	N	L	L
Street, New Public or Private, Serving more than 1 Residence	N	L	L
Stormwater Detention/Disposal Facility	N	L	L
Utility Facility	N	L	L
Utilities Repair Maintenance	L	P	P
Vegetation Removal, Forest Practice Class I	L	L	P
Vegetation Removal, Forest Practice Class II, III	SP	SP	SP
Vegetation Removal, Forest Practice Class IV	L	L	L
Vegetation Removal, nonforest practice	L	L	P
Water Well Pump House, Wildlife Blind, Nesting Structure	L	P	P

Notes: Uses and activities listed above are defined in Article 10-1C and Chapter 2 of this Code. Some uses listed here may not be permitted within the underlying zone, as defined in Chapter 2.
P = Permitted if the use is permitted in the underlying zone (see Chapter 2).
N = Not permitted.
L = Limited Uses. These uses are permitted if they are allowed by the underlying zone and they comply with the standards of this article, as well as the underlying zone (see Chapter 2)
L [1] = New development shall not impact wetlands and permits shall not be conditioned to allow for mitigation
SP = State Permit subject to standards of this article
NA= Not Applicable
Other uses and activities not listed may be allowed by the Zoning Administrator subject to the purpose and intent of this article.

E. Coordination with Other Permit Processes.

1. This article does not require any permit in addition to those otherwise required by City ordinances.
2. The performance standards and other requirements of this article shall be applied to uses and activities shown in subsection "D" above or Section 10-6B-6, subsection "B", through any permit or approval process otherwise required by City ordinances.
3. Uses and activities in a critical area or buffer for which no permit or approval is required by any other City ordinance remain subject to the performance standards and other requirements of this article.
4. The City of Liberty Lake may approve, approve with conditions, or deny any permit application for a use or activity listed in subsection "D" above or Section 10-6B-6, subsection "B", in order to comply with the requirements of this article.

F. Process - Regulation of Wetlands, Fish and Wildlife Habitats, Geo-hazard Areas, and Critical Aquifer Recharge Areas.



NOTE: Appeal process follows route of associated permit. Appeals of administrative decisions regarding provisions of this article use the administrative appeal process contained within this Code.

G. Wetland, Fish and Wildlife Habitats, Geo-hazard Maps, and Critical Aquifer Recharge Areas.

1. The City maintains maps of wetlands, fish and wildlife habitats, geo-hazard areas, and critical aquifer recharge areas, as applicable, to provide information to the public and to aid in the administration of this article. The maps are not regulatory in nature.

2. The maps will be used to identify the possible existence of wetlands, fish and wildlife habitats, geo-hazard areas, and critical aquifer recharge areas. The maps in conjunction with site visits and other information will be used as a basis for requiring field investigations such as wetland reports, fish and wildlife management plans, geo- technical studies, and hydrogeologic reports. In the event of a conflict between the information shown on the maps and information shown as a result of field investigations, the latter shall prevail.

3. Additions, corrections, and periodic updates to the maps shall be made when new or additional information is available. Omission of a site from the map will not exempt the site from complying with the provisions of this article. When an interpretation is needed as to the existence of a wetland, fish and wildlife habitat, geo-hazard area, and critical aquifer recharge areas, the Zoning Administrator shall make such determination according to the criteria and characteristics contained in this article and consultation with an agency or agencies of expertise as deemed appropriate by the Zoning Administrator.

H. Appeal of an Administrative Decision. The provisions of this section shall apply to any appeal involving an administrative decision on the requirements of this article. Any person aggrieved by an administrative decision of this article may file an appeal by:

1. Following the appeal procedures of the associated application; or

2. If there is no associated application or appeal process, follow the process in Section 10-4G-2, subsection H for Appeals of Administrative Interpretations by the Zoning Administrator.

I. Appeal of a Decision by the Hearing Examiner. Appeals of a Hearing Examiner decision shall be provided for by the City of Liberty Lake Hearing Examiner Ordinance and this Code.

Pending completion of all conditions of approval which need to be completed prior to permit issuance, permits can be released prior to the lapse of the appeal period; provided, that the City has no liability for expenses, delays, or inconvenience incurred by the applicant if the project/proposal is overturned or altered upon appeal.

J. Nonconforming Provisions. The provisions of Article 10-5C (Nonconforming Uses) of the Development Code, as amended, shall apply in determining the nonconforming status of a lot, use, building, or structure under the provisions of this article.

K. Enforcement. The provisions of this article shall be enforced by the Zoning Administrator or his or her designee in accordance with the procedures in Article 10-1D of this Code.

10-6B-2 Emergency Permits & Reasonable Use Exceptions

A. Emergency Activities - Temporary Emergency Permit.

1. Criteria for Granting a Temporary Emergency Permit. Notwithstanding the provisions of this article or any other laws to the contrary, the Zoning Administrator may issue a temporary emergency wetlands permit or allow regulated uses or activities in a fish and wildlife habitat conservation area or geologically hazardous area if:

a. The Zoning Administrator determines that an imminent threat to public health, safety, or the environment will occur if an emergency permit is not granted; and

b. The threat or loss may occur before a wetlands permit or fish and wildlife habitat conservation area review can be issued or conditioned under the procedures otherwise required by this article.

2. Conditions of Emergency Permit. Any emergency permit granted shall:

a. Incorporate to the greatest extent practicable the standards and criteria required for non-emergency activities;

b. Be limited in duration to the time required to complete the authorized emergency activity, not to exceed ninety days without re-application; and

c. Require the restoration of any wetland, fish and wildlife habitat conservation area or geologically hazardous area altered as a result of the emergency activity within ninety days following the emergency repair, or during the growing season after the emergency repair.

B. Reasonable Use Exception.

1. Requirements. If an applicant for a development proposal demonstrates to the satisfaction of the Zoning Administrator that application of the standards of this article would deny all reasonable use of the property, development as conditioned shall be allowed. The applicant shall pay a fee, as established in the adopted City Fee Schedule, which may cover mailing and processing and submit documentation on forms provided by City demonstrating all of the following to the satisfaction of the Zoning Administrator:

a. Applications of this article would deny all reasonable use of the property; and

b. There is no reasonable use with less impact on the wetland, fish and wildlife habitat, or geo-hazard area; and

c. The requested use or activity will not result in any damage to other property and will not threaten the public health, safety, or welfare on or off the property; and

d. Any alteration to the wetland, fish and wildlife habitat, or geo-hazard area is the minimum necessary to allow for reasonable use of the property; and

e. The inability of the applicant to derive reasonable use is not the result of actions by the applicant in subdividing the property or adjusting boundary lines thereby creating the undevelopable condition after the effective date this Code.

2. Decision. The Zoning Administrator shall include findings on each of the evaluation criteria listed above in a written decision. The written decision shall be mailed to the applicant and adjacent property owners, including property owners across public rights-of-way or private easements. The written decision shall include conditions necessary to serve the purposes of the article and shall provide an appeal procedure as contained in Section 10-6B-1, subsections "H" and "I" of this article.

10-6B-3 Wetlands

A. Wetland Reports. When a regulated use or activity (refer to Section 10-6B-1, subsection "D") is proposed on a property which is within a wetland or wetland buffer area, a wetland report is required. The applicant or proponent shall, provide a wetland report prepared by a qualified

wetland specialist according to the standards found below and using the Wetlands Delineation Manual.

1. Information to be Included in a Wetland Report. A wetland report shall include the following:
    a. Vicinity map;
    b. When available, a copy of a National Wetland Inventory Map (U.S. Fish and Wildlife Service and/or a City of Liberty Lake Wetland Inventory Map) identifying the wetlands on or adjacent to the site;
    c. A site map setting forth all of the following:
        i. Surveyed wetland boundaries based upon a delineation;
        ii. Site boundary property lines and roads;
        iii. Internal property lines, rights-of-way, easements, etc.;
        iv. Existing physical features of the site including buildings, fences, and other structures, roads, parking lots, utilities, water bodies, etc.;
        v. Contours at the smallest readily available intervals, preferably at two- foot intervals;
        vi. Hydrologic mapping showing patterns of surface water movement and known subsurface water movement into, through, and out of the site area.
        vii. Location of all test holes and vegetation sample sites, numbered to correspond with flagging in the field and field data sheets.
        viii. The City may require an air photo with overlays displaying the site boundaries and wetland delineation.
    d. A report which includes the following
        i. Location information (legal description, parcel number and address);
        ii. Delineation report. The wetland boundaries on the site established by the delineation shall be staked and flagged in the field. If the wetland extends outside the site, the delineation report shall discuss all wetland areas within one hundred fifty feet of the site, but need only delineate those wetland boundaries within the site;
        iii. General site conditions including topography, acreage, and surface areas of all wetlands identified in the City of Liberty Lake wetland atlas and water bodies within one quarter mile of the subject wetland(s);
        iv. Hydrological analysis, including topography, of existing surface and known significant subsurface flows into and out of the subject wetland(s);
        v. Analysis of functional values of existing wetlands, including vegetative, faunal, and hydrologic conditions;
        vi. A summary of proposed activity and potential impacts to the wetland(s);
        vii. Recommended wetland category, including rationale for the recommendation;
        viii. Recommended buffer boundaries, including rationale for boundary locations;
        ix. Proposed on-site residential density transfer from wetlands and/or buffers to upland areas.
        x. Site plan of proposed activity, including location of all parcels, tracts, easements,

roads, structures, and other modifications to the existing site. The location of all wetlands and buffers shall be identified on the site plan.

2. Modifications to Wetland Reports. The Zoning Administrator shall have the authority to modify the requirements for the wetland report. The wetland report requirement may be modified for lots in existence prior to the effective date of this Code and for lots, tracts or parcels which are equal or greater than five acres in size. A partial or modified determination of a wetland boundary may be approved if the following is provided:

   a. The owner designates a building envelope(s) on the property which would restrict regulated activities as defined by this article to an area of the property where no significant effect on the wetland is likely;

   b. The building envelope(s) shall be recorded on the property with the Spokane County auditor's office that contain such restrictions to ensure compliance with this article;

   c. A statement shall be recorded on the property which contains the following language "The property is subject to building envelope restrictions which were placed on the property to protect wetland and wetland buffer areas. An actual wetland determination, wetland boundary determination, wetland rating, and wetlands report as provided for in this article has not been completed and the property owner is subject to the provisions of this article."

   d. The Zoning Administrator, in modifying the requirement for a wetland report shall consider but not be limited to the following: i) evidence of the wetland location; ii) the proposal and its proximity to the wetland and wetland buffer areas and its probable environmental impacts; and iii) the proposed use or activity is at least two hundred feet from the appropriate wetland boundary.

   e. Where the applicant has provided a delineation of the wetland boundary, the City shall verify the accuracy of the delineation through consultation with the Washington State Department of Ecology or other agency of expertise as determined by Zoning Administrator, and may render adjustments to the boundary delineation.

   f. The Zoning Administrator shall have the authority to use federal or state wetland boundary determinations to meet applicable provisions of this article.

B. Wetlands Rating System. The following rating system, adapted from the State Department of Ecology publication, Washington State Wetlands Rating System for Eastern Washington, as amended, is adopted for the purpose of determining the size of wetland buffers, determining mitigation ratios, and reviewing permits under this article. For the purposes of this section, the U.S. Fish and Wildlife Service's Classification of Wetlands and Deepwater Habitats of the United States, FWS/OBS-79-31 (Cowardin et al., 1979, as amended) contains the descriptions of wetland types.

   1. Category 1 Wetlands. Wetlands which meet at least one of the following criteria:

      a. Documented habitat for endangered or threatened fish or animal species or for potentially extirpated plant species recognized by state or federal agencies;

      b. Wetlands which:

         i. Are equal to or greater than five acres in size; and

         ii. Have three or more wetland classes; and

         iii. Have an open water component at least one-half acre in area, or comprising at least ten percent of the total area of the wetland.

c. High quality, regionally rare wetland communities with irreplaceable ecological functions which may include sphagnum bogs, fens and forested wetlands occurring on organic soils.

d. Documented wetlands of local significance as adopted according to the process outlined in Section 10-6B-3, subsection B (5).

2. Category 2 Wetlands. Wetlands which meet any of the following criteria, and which are not Category 1 wetlands:

   a. Wetlands containing documented habitat for sensitive plant, fish, or animal species listed by state or federal agencies of jurisdiction.

   b. Wetlands which:

      i. Are equal to or greater than one acre in size; and

      ii. Have forty percent to sixty percent open water in dispersed patches; and

      iii. Have two or more wetland vegetative classes (a vegetative class must be at least one-half acre in size or comprise at least ten percent of the entire wetland).

   c. Riparian wetlands.

   d. Documented wetlands of local significance as adopted according to the process outlined in Section 10-6B-3, subsection B (5).

3. Category 3 Wetlands.

   a. Wetlands which are not Categories 1, 2, or 4 wetlands; and,

   b. Are vernal wetland systems found in low annual rainfall areas (less than eighteen inches).

4. Category 4 Wetlands. Wetlands which are not Category 1 or Category 2 wetlands and which:

   a. Are equal to or less than one acre in size; and are hydrologically isolated wetlands; and are comprised of one vegetated class and more than ninety percent of the arial cover is any combination of Soft rush (Juncus effusus),

   b. Hard hack (Spiraea douglasii) or Cattail (Typha latifolia); or

   c. Are wetlands less than two acres and hydrologically isolated, with one vegetated class and more than ninety percent of arial cover is any combination of species from the list in Table 7 of Washington State Wetlands Rating System for Eastern Washington.

5. Wetlands of Local Significance - Nomination Procedure. In order to increase the rating of a wetland and adjust buffering requirements accordingly, the following nomination procedure is provided.

   a. To nominate a wetland of local significance an individual or organization must submit written and/or graphic information to the City which demonstrates a need for increased protection based on:

      i. Potential for degradation based on nature or intensity of surrounding land use;

      ii. Uniqueness in area;

      iii. Potential for educational value;

      iv. Benefit to wildlife;

      v. Significance for aquifer recharge;

      vi. Significance for stormwater management and treatment;

vii. Others.

b. The submittal shall include a wetlands delineation, values, and functions assessment and rating meeting the standards of this section.

c. A statement requesting Category I or Category II status for the wetland and any supporting information.

d. A statement of support for the nomination signed by the owner of the property on which the wetland is located.

e. Submitted proposals will be reviewed for accuracy and effectiveness by City staff and other agencies or experts deemed appropriate by the Zoning Administrator.

f. A public hearing will be scheduled on complete nominations before the appropriate hearing body.

C. Wetland Buffer Areas.

1. Standard Buffer Area Widths. Wetland buffer areas shall be required for all regulated uses and activities adjacent to wetlands. Any wetland created, restored, or enhanced as compensation for wetland alterations shall also include the standard buffer required for the category of the created, restored, or enhanced wetland. All buffers shall be measured from the wetland boundary as determined in the field pursuant to the requirements of Section 10-6B-3, subsection "A". The width of the wetland buffer area shall be determined according to the category assigned to the wetland in accordance with Section 10-6B-3, subsection "B".

   a. Category 1 wetlands, minimum wetland buffer area width is two hundred feet.

   b. Category 2 wetlands, minimum wetland buffer area width is one hundred fifty feet.

   c. Category 3 wetlands, minimum wetland buffer area width is seventy-five feet.

   d. Category 4 wetlands, minimum wetland buffer area width is twenty-five feet.

2. Increased Wetland Buffer Area Width. The City may require increased buffer area widths on a case-by-case basis by the Zoning Administrator when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the wetland. The documentation must include but not be limited to the following criteria:

   a. The wetland is used by a plant or animal species listed by the federal government or the state as endangered, threatened, candidate, sensitive, monitored, or documented priority species or habitats, or essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or

   b. The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse wetland impacts; or

   c. The adjacent land has minimal vegetative cover or slopes greater than thirty percent.

3. Reduction of Standard Wetland Buffer Area Width. The department may reduce the standard wetland buffer area width on a case-by-case basis by the Zoning Administrator where it can be demonstrated that:

   a. The adjacent land has a high-quality vegetative buffer, has less than fifteen percent slopes, and no direct or indirect, short-term, or long-term, adverse impacts to wetlands will result from a regulated activity. The City may require long-term monitoring of the project and subsequent corrective actions if adverse impacts to wetlands are discovered; or

b. The project includes a buffer enhancement plan using native vegetation which substantiates that an enhanced buffer will improve the functional attributes of the buffer to provide additional protection for wetland functions and values. An enhanced buffer shall not result in greater than a twenty-five percent reduction in the buffer width or be less than twenty-five feet.

4. Standard Buffer Width Averaging. Standard wetland buffer areas may be modified by averaging buffer widths or a combination of averaging and reduction. Wetland buffer width averaging shall be allowed only when all of the following apply:

   a. Averaging will provide the necessary biological, chemical, and physical support necessary to protect the wetland in question, taking into account the type, intensity, scale, and landscape location of the proposed land use;

   b. The wetland contains variations in sensitivity due to existing physical characteristics which justify the averaging;

   c. The land uses causing the least disturbance would be located adjacent to areas where the buffer width is reduced, and that such land uses are guaranteed in perpetuity by covenant, deed restriction, easement, or other legally binding mechanism;

   d. Width averaging will not adversely impact the wetland's functions and values;

   e. The total area contained within the wetland buffer after averaging is no less than that contained within the standard buffer prior to averaging. In no instance shall the buffer width be reduced by more than fifty percent of the standard buffer or be less than twenty-five feet.

5. Wetland Buffer Maintenance. Except as otherwise specified, wetland buffer areas shall be retained in their natural condition. Where buffer disturbances have occurred, revegetation with native vegetation shall be required.

6. Permitted Uses in a Wetland Buffer Area. Regulated activities shall not be allowed in a buffer area except for the following:

   a. Activities having minimal adverse impacts on buffers and no adverse impacts on wetlands. These may include low intensity, passive recreational activities such as pedestrian/bike trails which should be setback fifty feet from the wetland boundary if possible and shall be a maximum of fourteen feet in width, nonpermanent wildlife watching blinds, short term scientific or education activities, and sports fishing or hunting (refer to Section 10-6B-1, subsection "D").

   b. Motorized vehicles shall not be allowed in wetland buffer areas except as part of an approved mitigation plan or permitted activity such as noxious weed control.

D. Wetland Mitigation.

1. Mitigation Options. New development shall not impact wetlands and permits shall not be conditioned to allow for wetland impact. Wetland alteration from development or other activities should not cause adverse impacts to the wetland or its buffer area. If adverse impacts do occur, restoration, creation, or enhancement of the wetlands will be made to offset the impacts. An appropriate mitigation plan shall be prepared that provides for mitigation measures as outlined below. Wetland mitigation means the use of any or all of the following actions listed in descending order of preference:

   a. Avoiding the impact altogether by not taking certain action or parts of an action;

   b. Minimizing impacts by limiting the degree or magnitude of the action and its

implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; or

f. Monitoring the impact and the compensation project and taking appropriate corrective measures. Mitigation may include a combination of the above measures.

2. Wetlands Mitigation Ratios. Any person who degrades wetlands shall restore, create, or enhance equivalent areas or greater areas of wetlands than those altered in order to compensate for loss of wetland acreage or functions according to the following ratios:

Category	Wetland Area Impacted	Wetland Replacement Area Required	
Category I	1	to	6
Category II or III			
Forested	1	to	3
Scrub-shrub	1	to	3
Emergent	1		1.5
Category IV	1	to	1.25

3. Wetland Enhancement. Any person who degrades wetlands may propose to enhance existing wetlands in order to compensate for wetland losses. Proposals to enhance wetlands shall identify how enhancement conforms to the overall goals and requirements of the wetlands protection program. A wetlands enhancement compensation project shall be considered, provided that enhancement for one function and value will not degrade another function or value. Acreage replacement ratios may be increased up to one hundred percent to recognize existing functional values. Category I wetlands shall not be enhanced.

4. Increased Replacement Ratio. The standard replacement ratio may be increased under the following circumstances:

a. High degree of uncertainty as to the probable success of the proposed restoration or creation;

b. Significant period of time between destruction and replication of wetland functions;

c. Projected losses in functional value and other uses, such as recreation, scientific research, and education, are relatively high;

d. Not possible to create or restore same type of wetland;

e. Off-site compensation is offered.

5. Decreased Replacement Ratio. The standard replacement ratio may be decreased under the following circumstances:

a. Scientifically supported evidence which demonstrates that no net loss of wetland function

or value is attained under the decreased ratio.

b. In all cases a minimum acreage replacement ratio of 1:1 shall be required.

6. In-Kind/Out-Of-Kind Mitigation. In-kind mitigation shall be provided except when the following apply:

   a. The wetland system is already degraded, and out-of-kind replacement will result in a wetland with greater functional value; or

   b. Technical problems such as exotic vegetation and changes in watershed hydrology make implementation of in-kind mitigation impossible. Where out-of- kind replacement is accepted, greater acreage replacement ratios may be required to compensate for lost functional values.

7. On-Site/Off-Site Mitigation. On-site mitigation shall be provided except when the following apply:

   a. The hydrology and ecosystem of the original wetland and those who benefit from the hydrology and ecosystem will not be damaged by the on-site loss; and

   b. On-site mitigation is not scientifically feasible due to problems with hydrology, soils, or factors such as other potentially adverse impacts from surrounding land uses; or

   c. Existing functional values at the site of the proposed restoration are significantly greater than lost wetland functional values; or

   d. Established goals for flood storage, flood conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation measures at another site.

8. Mitigation Outside of Primary Drainage Basin. Wetland creation or restoration shall occur within the same primary drainage basin as the wetland loss occurred, unless the applicant can demonstrate that:

   a. The hydrology and ecosystem of the original wetland and those who benefit from the hydrology and ecosystem will not be substantially damaged by the loss within that primary drainage basin; and

   b. In-basin mitigation is not scientifically feasible due to problems with hydrology, soils, or other factors such as other potentially adverse impacts from surrounding land uses; or

   c. Existing functional values in a different primary drainage basin are significantly greater than lost wetland functional values; or

   d. Established goals for flood storage, flood conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation measures in a different primary drainage basin.

9. Mitigation Site Selection. In selecting mitigation sites, applicants shall pursue siting in the following order of preference:

   a. Upland sites which were formerly wetlands;

   b. Degraded upland sites generally having bare ground or vegetative cover consisting primarily of exotic introduced species, weeds, or emergent vegetation; and

   c. Other upland sites.

10. Timing of Mitigation. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora.

11. Components of Mitigation Plans. All wetland restoration, creation, and/or enhancement projects required pursuant to this article shall follow a mitigation plan which meets City requirements. The Zoning Administrator must give written approval for a mitigation plan prior to commencement of any wetland restoration, creation, or enhancement activity. The mitigation plan shall contain at least the following components:

    a. Baseline Information. A written assessment and accompanying maps of the impacted wetland including, at a minimum, wetland delineation; existing wetland acreage; wetland impacts; vegetative, faunal, and hydrologic characteristics; soil and substrate conditions; and topographic elevations. If the mitigation site is different from the impacted wetland site, baseline information should also include: the watershed; surface hydrology; existing and proposed adjacent land uses; proposed buffers; and ownership.

    b. Environmental Goals and Objectives. A written report shall be provided identifying goals and objectives and describing; site selection criteria; mitigation goals; target evaluation species and resource functions; dates for beginning and completion; and a complete description of the functions and values sought in the new wetland. The goals and objectives shall be related to the functions and values of the original wetland, or if out-of-kind, the type of wetland to be emulated. The report shall also include an analysis of the likelihood of success of the mitigation project at duplicating the original wetland, and the long-term viability of the project, based on the experiences of comparable projects, if any.

    c. Monitoring Program. Specific measurable criteria approved by the Zoning Administrator shall be provided for evaluating whether the goals and objectives of the project are being achieved, and for determining when and if remedial action or contingency measures should be implemented. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria. The mitigation plan manager will ensure work is completed in accordance with the mitigation plan and, if necessary, the contingency plan. The monitoring program will continue for five years after the completion of the project and be bonded with results of the monitoring data being reported to the Zoning Administrator.

    d. Detailed Construction Plans. Written specifications and descriptions of mitigation techniques shall be provided, as specified by the Zoning Administrator.

    e. Construction Oversight. The construction of the mitigation project will be monitored to ensure that the project fulfills its goals.

    f. Contingency Plan. The plan must identify potential courses of action that can be taken when monitoring or evaluation indicates project performance standards are not being met.

    g. Permit Conditions. Any mitigation plan prepared pursuant to this article shall become part of the wetland permit application.

    h. Consultation with Other Agencies. Applicants are encouraged to consult with federal, state, and local agencies having expertise or interest in a mitigation proposal.

E. Protection of Wetlands and Wetland Buffer Areas.

1. Easements, Title Notices, Plat Dedications. Separate tract(s) containing wetland(s) and/or wetland buffer areas may be required to be created. Wetland or wetland buffer areas shall be protected by one or more of the following methods:

    a. A conservation easement or deed restriction prohibiting alteration and requiring protection of native vegetation within a wetland or wetland buffer area may be dedicated to the City

of Liberty Lake or other public or non-profit entities (e.g., land trusts) specified by the City

b. A title notice shall be recorded on the property or portion of the property containing a wetland or wetland buffer area. The title notice shall provide notice of a wetland delineation, if any exists, or indicate location of wetlands or wetland buffer areas on the property. A required title notice shall prohibit in perpetuity the development, alteration, or disturbance of vegetation within the wetland or wetland buffer area except when in conformance with this article.

c. Any land division which requires the recording of a final plat shall provide on the face of such plat the boundary of such wetland and wetland buffer area with a reference to separately recorded conservation easements, title notices, or deed restrictions as appropriate. Subdivisions with tracts of land which are equal to or greater than five acres may provide for building envelopes as provided in Section 10-6B-3, subsection "A".

d. Regardless of the method chosen to protect and preserve the wetland or wetland buffer area, such areas shall be maintained by the landowner, adjacent lot owner(s), homeowner's association, the permit applicant or agent, or an appropriate entity as approved by the City.

2. Access Limitations, Signs, Fencing, and Best Management Practices. Access to wetlands and wetland buffer areas will normally be allowed, subject to unique conditions which warrant access limitations:

a. The perimeter of the wetland and wetland buffer areas to be disturbed pursuant to an approved wetland permit or authorization shall be marked in the field, inspected by the review authority prior to the commencement of permitted activities. This temporary marking shall be maintained throughout the duration of the development activity;

EXAMPLE TITLE NOTICE

TITLE NOTICE FOR WETLANDS AND WETLAND BUFFER AREAS

FILED BY:
City of Liberty Lake or Property Owner
22710 E. Country Vista Drive
Liberty Lake, WA 99019 (509) 755-6700

Assessors Tax Parcel Number: _____

Legal Description: (use existing legal unless a specific lot or easement description is used)
_____
_____

NOTICE IS GIVEN TO ALL PARTIES WITH INTEREST IN THE ABOVE-DESCRIBED PROPERTY,
Authority:_____
City of Liberty Lake Ordinance

This property contains a (specific critical area) as defined by the City of Liberty Lake Wetlands, Fish and Wildlife Habitat, and Geo-hazard Areas Protection Ordinance. Restrictions on use or alteration of the (specify critical area) exist due to the natural conditions of the property and resulting regulations. The property was the subject of a proposal for a (type of permit). A copy of the application has provided information on the location of the (specify critical area) and restriction on their use. A copy of the plan showing the (specify critical area) and restrictions on their use. A copy of the plan showing the (specify critical area) is attached hereto. Additional information is available for inspection at the City of Liberty Lake, see File No. _____. Restricted and allowed use within these areas are provided in the City of Liberty Lake Critical Areas Ordinance.

EXECUTED this_____day of_____, 20_____.

NOTARY

THE TERMS OF THIS NOTICE SHALL RUN WITH THE LAND AND APPLY TO THE APPLICANT, OWNERS, HEIRS, ASSIGNS AND SUCCESSORS IN INTEREST. RELEASE OF THIS TITLE NOTICE CAN ONLY BE ACCOMPLISHED THROUGH THE AUTHORITY OF THE CITY OF LIBERTY LAKE OR ITS SUCCESSOR BY RECORDING OF A "TITLE NOTICE EXTINGUISHMENT" BASED UPON A FINDING THAT SUCH RELEASE SHOULD OCCUR.

BY CITY OF LIBERTY LAKE:

Name:_____Title:_____

Signature:_____Date:_____

b. As a condition of any permit or authorization issued pursuant to this article, the applicant may be required to install permanent signs along the boundary of a wetland or wetland buffer area. In some instances, a tree, hedge row, or other permanent physical location may be used to mark the boundary as approved by the Zoning Administrator;

The sign shall be made of a treated wood or metal face attached to a treated wood base (monument style), or another material of equal durability. The sign shall be worded as follows or with alternative language approved by the Zoning Administrator:

"Wetland or Wetland Buffer Area - Do Not Disturb Natural Area Contact the City of Liberty Lake Regarding Uses and Restrictions"

c. As a condition of any permit or authorization issued pursuant to this article, the applicant may be required to utilize best management practices as prescribed by the Natural Resource Conservation Service. This may include the installation of a permanent fence around the wetland and wetland buffer area when domestic grazing animals are present or may be introduced within the project.

F. Time Period, Authorized Activity.

1. Authorization to undertake regulated activities within a wetland or wetland buffer area shall normally be valid for the period of the underlying permit.
2. Prior to the granting of an extension to an underlying permit, the review authority may require updated studies and/or additional hearings if, in its judgment, the original intent of the permit is altered or enlarged by the renewal, or if the applicant failed to abide by the terms of the original permit.

G. Bonding or Other Financial Performance Guarantee.

1. The Zoning Administrator may require the applicant of a development proposal to post a cash performance bond or other security acceptable to the City in an amount and with surety and conditions sufficient to fulfill the requirements set forth in the permit or approval;
2. In the event of a breach of any condition of any such bond, the Zoning Administrator may initiate action in Spokane County Superior Court to execute the bond;
3. The Zoning Administrator shall release the performance bond upon determining that:
   a. All activities have been completed in compliance with the terms and conditions of the permit or approval and the requirements of this article, and
   b. Posting of a maintenance bond by the applicant, if applicable.
4. The principal or surety cannot be terminated or canceled without written release of the bond or other financial performance guarantee by the City.
5. The Zoning Administrator shall release the maintenance bond upon determining that performance standards established for evaluating the effectiveness and success of the structures, improvements and/or mitigation as established in the mitigation plan have been satisfactorily met for the required period.
6. For mitigation projects, the performance standards shall be those contained in the mitigation plan developed and approved during the permit review process, and the maintenance bond applicable to this project shall not be released until the Zoning Administrator determines that performance standards established for evaluating the effect and success of the project have been met.

7. Performance Bonds or Financial Performance Guarantee. The applicant shall provide demonstration of administrative, supervisory, and technical competence, financial resources, and scientific expertise of sufficient standing to successfully execute the mitigation plan. The applicant will name a mitigation project manager and provide the qualifications of each team member involved in preparing, implementing, and supervising the mitigation plan. This shall include educational background and areas of expertise, training, and experience with comparable projects. In addition, bonds ensuring fulfillment of the mitigation project, monitoring program, and any contingency measure shall be posted in the amount of one hundred twenty-five percent of the expected project cost of mitigation, plus a factor to be determined to allow for inflation during the time the project is being monitored. An administration fee for the mitigation project may be assessed to reimburse the City for costs incurred during the course of the monitoring program.

10-6B-4 Fish & Wildlife Habitat Conservation Areas

A. Priority Habitats and Species Designation. Washington State Priority Habitat and Species Program. The priority habitats and species of the City of Liberty Lake are identified below and are adopted from the Washington State Priority Habitats and Species Program, as now or hereafter amended. Due to the dynamic nature of fish and wildlife populations and their habitats, the priority habitats and species program will be revised periodically as species and habitats are added, deleted, or redefined. The location of these priority habitats and known point locations such as den or nest site of priority species are depicted on the City of Liberty Lake fish and wildlife conservation areas map, as applicable.

Priority Habitats and Species of the City of Liberty Lake	
Priority Habitat	**Criteria**
Wetlands and Deepwater	Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands must have all of the following characteristics: (1) the land supports predominantly hydrophytic plants, (2) soils are hydric and (3) soils are saturated with water or covered by the shallow water at some time during the growing season of each year. Deepwater habitats are permanently flooded lands lying below the deepwater boundary of wetlands. Deep water habitats include environments where surface water is permanent and often deep, so that water, rather than air is the principal medium within which the dominant organisms live. Wetlands and deepwater habitats support comparatively high wildlife density and diversity, provide breeding habitat and seasonal ranges, have limited availability and high vulnerability to habitat alteration.
Riparian	Riparian habitat is defined as an area adjacent to flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. In riparian habitat, the vegetation, water tables, soils, microclimate, and wildlife inhabitants of terrestrial ecosystems are influenced by perennial or intermittent water, and the biological and physical properties of the adjacent aquatic ecosystems are influenced by adjacent vegetation, nutrient and sediment loading, terrestrial wildlife and organic debris from the land. Riparian areas have high wildlife density and high species diversity. They serve as important wildlife breeding and seasonal ranges. They are important movement corridors and are highly vulnerable to habitat alteration.

Cliffs/Bluffs	Greater than 25 feet high and below 5,000 feet elevation. These areas are significant for wildlife breeding habitat, have limited availability and support unique assemblages of species.
Old Growth Forest	Tree stands are highly variable in species composition and structural characteristics due to the influence of fire, climate, and soil. In general, stands will be > than 150 years old, with 10 trees per acre > 21" dbh and 1-3 snags per acre > 12-14" diameter. Downed logs may vary from abundant to absent. Canopies may be single or multilayered. Evidence of human-caused alterations to the stand will be absent or so slight as to not affect the ecosystem structures and functions. Old growth forests have high wildlife density and diversity. They are important for breeding habitat and seasonal ranges. Old growth forests are limited and declining and have a high vulnerability to habitat alteration.
Urban Natural Open Space	A priority species resides within or is adjacent to the open space and uses it for breeding and/or regular feeding. This habitat may also function as a corridor connecting other priority habitat areas, especially those that would otherwise be isolated; and/or the open space is an isolated remnant of natural habitat larger than 10 acres and is surrounded by urban development. Local consideration may be given to open space areas smaller than 10 acres. Urban Natural Open Space has comparatively high wildlife density and diversity, is important as a breeding habitat and is important as a movement corridor. These areas have limited availability and have a high vulnerability to habitat alteration.
Steppe	Relatively undisturbed areas as indicated by the dominance of native plants where grasses and forbs form the natural climax plant community. Steppe habitat has relatively high wildlife density and diversity, is important wildlife breeding habitat and important for seasonal range. This habitat has limited availability, high vulnerability to habitat alteration and supports unique and dependent species.
Shrub-Steppe	Large areas of relatively unfragmented shrub-steppe habitat, greater than 640 acres, should have a substantial amount of interior habitat. They should also contain a variety of habitat features (e.g., variety of topography, riparian areas, canyons, habitat edges, plant communities). Blocks should be relatively undisturbed, as indicated by a dominance of native vegetation. Portions may contain disturbed habitat. Shrub-steppe habitat supports comparatively high wildlife density and diversity, provides important wildlife breeding habitat and important seasonal ranges. This habitat has limited availability, high vulnerability to alteration and supports unique and dependent species.
White-tailed Deer Winter Range	Winter range is determined by a combination of factors: elevation, slope, aspect, snow depth, browse quality and quantity, presence of closed canopy mature forests, temperatures, and traditional deer movement patterns. Closed canopies of mature forests along streams are extremely important whitetail habitat.
Moose habitat	Aquatic feeding sites are found in areas of slow-moving water, ponds, swamps, and potholes which contain abundant submergent and emergent vegetation. Larger aquatic areas are preferred. These sites are characterized by a broad zone of hiding cover around the perimeter of the feeding site. Calving sites are characterized by roadless blocks of mature timber of 80 acres or greater which provide hiding cover and are adjacent to good forage where human disturbance is minimal.

Elk Habitat	Generally, the winter and summer ranges of a herd of elk are geographically separate. In eastern Washington, winter range consists of shrub-steppe, bunch grass of shrub plant communities adjacent to forest zones. Special features of elk habitat include corridors and wallows. These features are characterized by screening vegetation and lack disturbance. During hunting season elk seek the largest cover patches in their range. At other times of the year, smaller cover patches within 600 feet of forage areas are most important.
Wildlife Corridors	Wildlife corridors are landscape features that facilitate the biologically effective transport of animals between larger patches of habitat dedicated to conservation functions. Such corridors may facilitate several kinds of traffic including frequent foraging movements, seasonal migrations or the once in a lifetime dispersal of juvenile animals. These are transitional habitats and need not contain all the habitat elements required for the long-term survival or reproduction of its migrants.
Landscape Linkages	Landscape linkages differ from a movement corridor in that the complete range of community and ecosystem processes continue to operate within it through time. Plants and smaller animals are able to move between larger landscapes over a period of generations.

Priority Species	Status
Amphibians	
Spotted Frog	State and Federal Candidate
Birds	
American White Pelican	State Endangered
Ash-Throated Flycatcher	State Monitor
Bald Eagle	State and Federal Threatened
Black-backed Woodpecker	State Monitor
Blue Grouse	Game
Burrowing Owl	State Candidate
Cavity Nesting Ducks (includes Barrow's Goldeneye, Bufflehead, Common Goldeneye, Hooded Merganser and Wood Duck)	Game
Common Loon	State Candidate
Flammulated Owl	State Candidate
Golden Eagle	State Candidate
Grasshopper Sparrow	State Monitor
Great Blue Heron	State Monitor
Horned Grebe	State Monitor
Lewis Woodpecker	State Candidate
Long Billed Curlew	State Monitor
Merlin	State Monitor
Northern Goshawk	State Candidate
Osprey	State Monitor
Peregrine Falcon	State Endangered
Pileated Woodpecker	State Candidate
Red-necked Grebe	State Monitor
Sandhill Crane	State Endangered
Snowy Owl	State Monitor
Trumpeter Swan	Game
Upland Sandpiper	State Endangered
Vaux's Swift	State Candidate
Western Bluebird	State Candidate
Western Grebe	State Monitor

White-headed Woodpecker	State Candidate
Fish	
Rainbow Trout	Game
Mammals	
Elk	Game
Moose	Game
Marten	Game
Pigmy Shrew	State Candidate
Rocky Mountain Mule Deer	Game
White-tailed Deer	Game

Note: Definitions for species status are contained in the Washington Department of Fish and Wildlife Management Recommendations for Priority Species and in WAC 232.12.

B. Regulated Uses and Activities in Priority Habitats.

1. For the purposes of this article, the City of Liberty Lake may restrict the regulated uses and activities shown in Section 10-6B-1, subsection "D" which lie within a priority habitat by definition or within one-quarter mile of a point location (den or nest site) of a non-game priority species through the application of the performance standards contained in Section 10-6B-4, subsection "C" below.
2. In cases where differences in regulations occur because of overlapping priority habitats or buffer areas, the regulation which provides the greatest degree of protection shall apply.

C. Performance Standards for Regulated Uses and Activities.

1. A management plan, if required, will be used by the City of Liberty Lake to evaluate the impact of a use or activity on a priority habitat or species and may require mitigating measures to protect fish and wildlife based on the management plan recommendations.
2. Riparian Habitat Performance Standards.
    a. Except as otherwise specified, riparian areas shall be retained in their natural condition. Riparian vegetation in buffer areas shall not be removed except in the case of fire or disease unless there is no alternative. For lots or parcels with water frontage on type 2 or 3 waters, one view/access corridor to the ordinary high-water mark may be cleared of riparian vegetation as long as the view/access corridor does not exceed a width of twenty-five feet.
    b. Roads within riparian buffer areas shall be kept to a minimum and shall not run parallel to the water body. Crossings where necessary, shall cross riparian areas at as near right angles as possible. If no alternative exists to placement of a roadway within a riparian area, mitigation may be required. Mitigation measures shall be specified in a management plan and may include, but are not limited to:
        i. Fencing of riparian buffer area to protect remaining vegetation; and
        ii. Enhancement of remaining riparian buffer area through planting of native vegetation. Water crossings must be approved by the Washington State Department of Fish and Wildlife according to WAC 75.20.100.
    c. Equestrian pedestrian/bike trails are permitted in riparian buffer areas but should be set back fifty feet from the ordinary high-water mark, if possible and shall be a maximum of fourteen feet in width.

d. Off-road motorized vehicle use in riparian buffers areas is prohibited.

e. Riparian buffer areas shall be established from the ordinary high-water mark. Water bodies classified by the water typing system (WAC-222-16-030) or if unclassified, as described below and in WAC-222-16-030, have the following buffer area requirements:

Water Type, General Description (see WAC-222-16-030)	**Riparian Buffer**
Type 1, Shorelines of Statewide Significance	250 feet
Type 2, Perennial stream with channel >20' wide	100 feet
Type 3, Perennial stream with channel >10' wide	100 feet
Type 4, Stream with channel <10', effects-quality of type 1, 2, or 3	75 feet
Type 5, Stream not classified as 1, 2, 3 or 4	25 feet*

* = No buffering requirement for type 5 streams when there is no connection to type 1, 2, 3 or 4 stream

f. The Zoning Administrator has the authority to reduce the buffer widths shown above by up to twenty-five percent if:

   i. A riparian buffer area is fenced to prevent damage to vegetation by livestock along its entire length; or

   ii. A riparian buffer area is enhanced using native plants including trees and shrubs according to a plan prepared in consultation with the Spokane County soil conservation district and the Washington State Department of Fish and Wildlife. The plan shall include numbers and species of plants, a planting schedule and maintenance agreement to insure long-term survival.

g. The Zoning Administrator has the authority to increase the buffer widths shown above by up to twenty-five percent on a case-by-case basis when a larger buffer is necessary to protect the fish and wildlife using the stream and riparian area. This determination shall be supported by appropriate documentation showing that the increased buffer width is reasonably related to the protection of the fish and/or wildlife using the stream and riparian area as indicated by meeting one or both of the following criteria:

   i. The land adjacent to the water is susceptible to severe erosion and other erosion control measures will not prevent adverse impacts.

   ii. The land adjacent to the water has minimal vegetative cover or slopes greater than thirty percent.

h. The Zoning Administrator has the authority to modify the standard buffer widths by averaging buffer widths. Averaging of buffer widths shall be allowed only when all of the following are demonstrated:

   i. Averaging will provide the necessary biological, chemical, and physical support necessary to protect the fish and wildlife using the riparian area in question, taking into account the type, intensity, scale and location of the proposed activity.

   ii. The riparian area contains variations in sensitivity due to existing physical characteristics which justify the averaging;

   iii. The land uses causing the least disturbance would be located adjacent to areas where the buffer width is reduced and that such land uses are guaranteed in perpetuity by covenant, deed restriction, easement, or other legally binding mechanism;

   iv. The total area contained within the buffer after averaging is no less than that

contained within the standard buffer prior to averaging.

3. Wetland habitat performance standards shall be according to the provisions of Section 10-6B-3.
4. All development proposals shall follow the bald eagle protection rules (RCW 77.12.655 and WAC 232.12.292), as now or hereafter amended, when the proposal is likely to have a direct impact on the habitat of the bald eagle.

D. Habitat Management Plans. A habitat management plan shall be prepared for regulated uses or activities (refer to Section 10-6B-1, subsection "D") which are located in a priority habitat or within one-quarter mile of a non-game priority species point location (den or nest site) if it is determined by the Zoning Administrator that the proposal is likely to have a significant adverse impact on the priority habitat or species. The determination of a need for additional information (habitat management plan) shall be made by the Zoning Administrator in consultation with the Washington State Department of Fish and Wildlife or other authority as determined by the Zoning Administrator. The following describes the requirements of a habitat management plan.

This report shall identify how the impacts from the proposed use or activity will be avoided or mitigated through habitat mitigation which meets the purposes of this article. The Management Recommendations for Washington's Priority Species (1991), as now or hereafter amended, and consultation with a habitat biologist from the Washington State Department of Fish and Wildlife shall be the basis for the report.

The habitat management plan shall be prepared by a qualified biologist shall be approved in writing by the Zoning Administrator and shall contain but not be limited to the following information:

1. A map(s) prepared at an easily readable scale, showing:
    a. The location of the proposed site;
    b. The relationship of the site to surrounding topographic and built features;
    c. The nature and density of the proposed use or activity;
    d. Proposed building locations and arrangements;
    e. A legend which includes:
        i. A complete and accurate legal description. The description shall include the total acreage of the parcel,
        ii. Title scale and north arrow,
        iii. Date,
        iv. Certification by a qualified biologist;
    f. Existing structures and landscape features including the name and location of all water bodies;
    g. Location of priority habitat types or priority species point locations.
2. A report which contains:
    a. A description of the nature, density and intensity of the proposed use or activity in sufficient detail to allow analysis of such land use change upon identified wildlife habitat.
    b. An analysis of the effect of the proposed use or activity upon fish and wildlife species and their habitats, identified within the priority habitat and species program as defined in this article.

c. A plan which explains how the applicant will avoid, minimize, or mitigate adverse impacts to fish and/or wildlife habitats created by the proposed use or activity. Mitigation measures within the plan may include, but are not limited to:

   i. Establishment of buffer areas;

   ii. Preservation of critically important plants and trees;

   iii. Limitation of access to habitat area;

   iv. Seasonal restriction of construction activities;

   v. Clustering of development and preservation of open space;

   vi. Signs marking habitats or habitat buffer areas;

   vii. Title notice or plat dedication warning statements;

   viii. Conservation easements.

d. Review comments by a habitat biologist from the Washington State Department of Fish and Wildlife (WDFW). If the habitat management plan recommends mitigation involving federally listed threatened or endangered species, migratory waterfowl or wetlands, the U.S. Fish and Wildlife Service shall receive a copy of the draft habitat management plan, and their review comments shall be included in the final report.

   The Washington State Department of Fish and Wildlife and, if required, the U.S. Fish and Wildlife service shall respond in writing to the Zoning Administrator with review comments or a request for additional information within fifteen days from the date of issuance of a draft habitat management plan. If review comments or a request for additional information is not received in the prescribed time frame, the state and/or federal review comments on the habitat management plan shall not be required. The Zoning Administrator shall have the authority to approve habitat management plans or require additional information.

e. Financial Guarantees. The Zoning Administrator may require the applicant to post a performance bond or other security according to the guidelines contained in Section 10-6B-3, subsection "G" to ensure implementation of the requirements of any mitigation plan approved pursuant to this article.

f. Habitats and Species of Local Importance. In addition to the priority habitats and species recognized by WDFW, a process is provided for listing or delisting other habitats and species that are important locally to the people of Liberty Lake. This action may be initiated at the request of the Washington State Department of Fish and Wildlife, other government agency, City staff, non- profit organization or interested citizen. Any such request shall be in writing and shall include:

   i. The common and scientific name for a species under consideration;

   ii. Habitat location on a map (scale 1:24,000);

   iii. Demonstrate a need for special consideration based on:

      aa. Declining or increasing population,

      bb. Sensitivity to habitat manipulation, o

      cc. Commercial or game value or other special value, such as public appeal;

      dd. Habitat management recommendations, including potential uses and restrictions of the habitat areas, seasonally sensitive areas, and other

guidelines necessary for the protection of the species;

ee. Reasons for the species/habitat to be designated or deleted from designation as a priority habitat or species;

ff. Name and address of the nominator, along with a statement of support for the nomination signed by the owner of the property on which the habitat is located;

gg. Other Supporting Documentation. Submitted proposals will be reviewed by City staff, WDFW and/or other local, state, or federal agencies or experts for comments and recommendations regarding accuracy of the data and effectiveness of proposed management strategies.

A public hearing shall be held for proposals found to be completed and approved nominations will be designated priority habitats/species as appropriate and will be given all protection under this article afforded other priority habitats and species.

g. Incentives and Stewardship Options. A variety of incentives and stewardship options which are available for preservation of priority habitats are presented in Section 10-6B-8 below.

10-6B-5 Geologically Hazardous Areas

A. Classification Characteristics. Geologically hazardous areas shall include both erosion and landslide hazard areas and be determined by the following characteristics:

1. Erosion and/or landslide hazard areas in the City shall contain at least one of the following characteristics:

   a. A slope of thirty percent or greater;

   b. Soils identified by Natural Resource Conservation Service as having a severe potential for erosion (see Section 10-6B-5, subsection "B" below);

   c. Hydraulic factors such as existing on-site surface and groundwater or changes in hydraulic factors, caused by proposals that create a severe potential for erosion or landslide hazard;

   d. Areas that historically have been prone to land sliding (areas adjacent to lakes, streams, springs) or any one of the following geologic formations: alluvium, landslide deposit, Latah formation;

   e. Areas of uncompacted fill;

   f. Areas that are unstable as a result of rapid stream or stream bank erosion.

B. Building Site Development Water Erosion Hazard. Prepared July 1994 by: USDA-Natural Resource Conservation Service Rock Pointe Tower II
316 W. Boone Ave., Suite 450, Spokane, WA. 99201-2348

Water erosion can be predicted or estimated using the Universal Soil Loss Equation (USLE). The USLE equation estimates or predicts tons of soil loss per acre per year with the formula A = RKLSCP

A = Estimate average annual erosion (tons/acre/yr.)

R = Rainfall factor (rainfall plus snow melt) K = Soil erodibility factor

L = Length of slope S = Percent slope
C = Cover factor (vegetation, mulch, etc.)
P = Conservation practices factor (terraces, etc.

A modified version of USLE was used to estimate erosion hazard for building site development. The C and P of the USLE equation are erosion management factors. Depending on the type of management applied they have values from near zero (0) to one (1). The value 1 represents no management applied that benefits erosion reduction.

Management factors (C and P) are not used when identifying the erosion hazard of map units for land use planning. This enables identification of the soil map unit's inherent erosion hazard potential that can aid in planning.

R factor is related to how much rainfall occurs and when. The higher the annual precipitation the higher the R factor. For the Spokane area an R of 54 was used.

K soil erodibility factor is the soils susceptibility of soil detachment by water. The soils K factor is based on the relationship of five soil factors; 1) percent silt plus very fine sand, 2) percent sand greater than 0.10 mm, 3) organic matter content, 4) soil structure, and 5) permeability. K factor values range from 0.02 to 0.64.

L and S are used together and are referred to as the LS factor. The L part is the length of Slope, which is the distance from a point of origin of overland flow to the point where the slope gradient decreases enough that deposition begins or where runoff water enters a well-defined channel that may be part of a drainage network. The S part is the percent slope between two points.

LS value is the relationship between the length of slope and steepness of slope. For example, LS for slope lengths of 50 feet are .76 at 8 percent slope, 1.01 at 12 percent slope, and 1.42 at 20 percent slopes (see table below).

The LS value is the value at the intersection of the length of slope and percent slope. Slope length is the distance in feet of an uninterrupted uniform slope.

See Table, Section 10-6B-5, subsection "C" below:

The Building Site Development Water Erosion Hazard Table was created using the modified version of USLE. Soft loss from water erosion was calculated for various soil K factors at slope groups of 0 to 8 percents, 8 to 15 percent and more than 15 percent. It is assumed that construction will expose the soil surface for a period of 3 to 6 months.

Using the estimated erosion for the period of time the soil is exposed, an index based on K factor and slope was calculated. This index is then used to assign erosion hazard ratings of slight, moderate, or severe. The index is a product of K times the average slope of the soil map unit (K*ave slope). Slight has an index of less than or equal to 3.0 (less than 5 tons/acre/yr.), moderate has an index of 3.0 to 4.0 (5 to 8 tons/acre/yr.), and severe has an index of greater than 4.0 (greater than 8 tons/acre/yr.). Only soils with a severe rating are shown on the table that follows.

The Building Site Development Water Erosion Hazard Table for Spokane County provides a tool for broad land use planning and identifying areas with developmental concerns. The information, however, has limitations. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil. The information is not site specific and does not eliminate the need for on-site investigation of the soils.

Soil Survey Spokane County, Washington 7/6/94

Map Symbol	Map Unit Name	Erosion Factors		Erosion Hazard
		K	T	
AaC	ATHENA SILT LOAM, 5 to 30 % SLOPES	0.37	5	severe
AaD	ATHENA SILT LOAM, 30 to 55 % SLOPES	0.37	5	severe
AaE	ATHENA SILT LOAM, 55 to 70 % SLOPES	0.37	5	severe
AaD	ATHENA SILT LOAM, 5 to 55 % SLOPES	0.37	5	severe
AlC	ATHENA-LANCE SILT LOAMS, 0 to 30 % SLOPES	0.37	5	severe
AlD	ATHENA-LANCE SILT LOAMS, 30 to 55 % SLOPES	0.37	5	severe
BaB	BERNHILL SILT LOAM, 0 to 20 % SLOPES	0.43	5	severe
BaC	BERNHILL SILT LOAM, 20 to 30 % SLOPES	0.43	5	severe
BaD	BERNHILL SILT LOAM, 30 to 55 % SLOPES	0.43	5	severe
BbB	BERNHILL SILT LOAM, MODERATELY SHALLOW 30 to 55 % SLOPES	0.37	2	severe
BfD	BERNHILL VERY STONY SILT LOAM, 20 to 55 % SLOPES	0.24	5	severe
BhD	BERNHILL SOILS, 20 to 55 % SLOPES	0.24	5	severe
BkC	BERNHILL VERY ROCKY COMPLEX, 0 to 30 % SLOPES	0.43	5	severe
BkD	BERNHILL VERY ROCKY COMPLEX, 30 to 55 % SLOPES	0.43	5	severe
BrC	BONG AND PHOEBE COARSE SANDY LOAMS, 20 to 30 % SLOPES	0.24	5	severe
BxD	BRICKEL STONY LOAM, 20 to 55 % SLOPES	0.24	2	severe
CeB	CEDONIA SILT LOAM, 5 to 20 % SLOPES	0.37	5	severe
CeC3	CEDONIA SILT LOAM, 20 to 30 % SLOPES, SEVERELY ERODED	0.37	5	severe
CtB	CLAYTON LOAM, 5 to 20 % SLOPES	0.37	3	severe
DaB	DREARYTON SILT LOAM, 5 to 20 % SLOPES	0.32	3	severe
DaC	DREARYTON SILT LOAM, 20 to 40 % SLOPES	0.32	3	severe
DrC	DRAGOON SILT LOAM, 0 to 30 % SLOPES	0.37	2	severe
DsC	DRAGOON STONY SILT LOAM, 0 to 30 % SLOPES	0.32	2	severe
DsD	DRAGOON STONY SILT LOAM, 30 to 55 % SLOPES	0.32	2	severe
DvD	DRAGOON VARIANT, VERY ROCKY COMPLEX 20 to 50 % SLOPES	0.37	1	severe
EID	ELOIKA VERY STONY SILT LOAM, 30 to 55 % SLOPES	0.24	3	severe
FaB	FREEMAN SILT LOAM, 30 to 55 % SLOPES	0.32	5	severe
FAB3	FREEMAN SILT LOAM, 5 to 20 % SLOPES, SEVERELY ERODED	0.32	5	severe
FaC3	FREEMAN SILT LOAM, 20 to 30 % SLOPES, SEVERELY ERODED	0.32	5	severe
GaC3	GARDFIELD SILTY CLAY LOAM, 0 to 30 % SLOPES, SEVERELY ERODED	0.32	5	severe
GpB	GLENROSE SILT LOAM, 5 to 20 % SLOPES	0.32	5	severe
GpC	GLENROSE SILT LOAM, 20 to 30 % SLOPES	0.32	5	severe
GpD	GLENROSE SILT LOAM, 30 to 55 % SLOPES	0.32	5	severe
GrD	GLENROSE SILT LOAM, 20 to 55 % SLOPES	0.24	5	severe
GsD	GLENROSE STONY SILT LOAM, 20 to 55 % SLOPES	0.32	5	severe
GtB	GREEN BLUFF SILT LOAM, 5 to 20 % SLOPES	0.32	5	severe
HfC	HAGEN LOAMY FINE SAND, 0 to 30 % SLOPES	0.32	5	severe
HvD	HESSELTINE VERY ROCKY COMPLEX, 30 to 55 % SLOPES	0.10	1	severe
LaD	LAKESOL SILT LOAM, 20 to 55 % SLOPES	0.32	5	severe

LeB	LAKETON SILT LOAM, 5 to 20 % SLOPES	0.37	5	severe
LmC	LANCE SILT LOAM, 0 to 30 % SLOPES	0.55	5	severe
LmC3	LANCE SILT LOAM, 0 to 30 % SLOPES, SEVERELY ERODED	0.55	5	severe
LnB2	LARKING SILT LOAM, 5 to 20 % SLOPES, ERODED	0.32	5	se
LnD2	LARKING SILT LOAM, 20 to 45 % SLOPES, ERODED	0.32	2	severe
MmC	MOSCOW SILT LOAM, 0 to 30 % SLOPES	0.32	2	severe
MmD	MOSCOW SILT LOAM, 30 to 55 % SLOPES	0.32	2	severe
MoC	MOSCOW SILT LOAM, SHALLOW, 0 to 30 % SLOPES	0.37	1	severe
MoD	MOSCOW SILT LOAM, SHALLOW, 30 to 55 % SLOPES	0.37	1	severe
MsC	MOSCOW VERY ROCKY COMPLEX, 0 to 30 % SLOPES	0.37	1	severe
MsE	MOSCOW VERY ROCKY COMPLEX, 30 to 70 % SLOPES	0.37	1	severe
NaC	NAFF SILT LOAM, 5 to 30 % SLOPES	0.32	5	severe
NaC2	NAFF SILT LOAM, 5 to 30 % SLOPES, ERODED	0.32	5	severe
NaC3	NAFF SILT LOAM, 0 to 30 % SLOPES, SEVERELY ERODED	0.32	5	severe
NaD2	NAFF SILT LOAM, 30 to 45 % SLOPES, ERODED	0.32	5	severe
NpB	NEZ PERCE SILT LOAM, 5 to 20 % SLOPES	0.32	5	severe
NpB3	NEZ PERCE SILT LOAM, 5 to 20 % SLOPES, SEVERELY ERODED	0.32	5	severe
PaC	PALOUSE SILT LOAM, MODERATELY SHALLOW, 20 to 30 % SLOPES	0.32	2	severe
PbC2	PALOUSE SILT LOAM, 5 to 30 % SLOPES, ERODED	0.32	5	severe
PcE	PALOUSE VERY ROCKY COMPLEX, 30 to 70 % SLOPES	0.10	1	severe
RdB	REARDAN SILT LOAM, 5 to 20 % SLOPES	0.37	3	severe
RdB2	REARDAN SILT LOAM, 5 to 20 % SLOPES, ERODED	0.37	3	severe
RdC2	REARDAN SILT LOAM, 20 to 30 % SLOPES, ERODED	0.37	3	severe
SaC	SCHUMACHER SILT LOAM, 20 to 30 % SLOPES	0.32	3	severe
SaC2	SCHUMACHER SILT LOAM, 20 to 30 % SLOPES, ERODED	0.32	3	severe
SaD	SCHUMACHER SILT LOAM, 30 to 55 % SLOPES	0.32	3	severe
ScD	SCHUMACHER GRAVELLY SILT LOAM, 30 to 55 % SLOPES	0.20	3	severe
ScD2	SCHUMACHER GRAVELLY SILT LOAM, 30 to 55 % SLOPES, ERODED	0.20	3	severe
SnC	SNOW SILT LOAM, 5 to 30 % SLOPES	0.32	5	severe
SoE	SPEIGLE VERY STONY SILT LOAM, 30 to 70 % SLOPES	0.20	5	severe
SpC	SPOKANE LOAM, 0 to 30 % SLOPES	0.28	2	severe
SpD	SPOKANE LOAM, 30 to 55 % SLOPES	0.28	2	severe
SrE	SPOKANE STONY LOAM, 30 to 70 % SLOPES	0.24	2	severe
SsC	SPOKANE COMPLEX, 0 to 30 % SLOPES	0.28	2	severe
SsE	SPOKANE COMPLEX, 30 to 70 % SLOPES	0.28	2	severe
StE	SPOKANE VERY ROCKY COMPLEX, 30 to 70 % SLOPES	0.28	2	severe
SuE	SPOKANE EXTREMELY ROCKY COMPLEX, 20 to 70 %SLOPES	0.24	2	severe
SzE	SPRINGDALE GRAVELLY LOAMY SAND, 30 to 70 % SLOPES	0.10	5	severe
TeC	TEKOA GRAVELLY SILT LOAM, 20 to 30 % SLOPES	0.24	2	severe
TeD	TEKOA GRAVELLY SILT LOAM, 30 to 55 % SLOPES	0.24	2	severe
TkD	TEKOA VERY ROCKY COMPLEX, 25 to 55 % SLOPES	0.24	2	severe
UhB	UHLIG SILT LOAM, 5 to 20 % SLOPES	0.37	5	severe
UmC	UHLIG VARIANT SILT LOAM, MODERATELY SHALLOW, 5 to 30 % SLOPES	0.37	2	severe
VaC	VASSAR SILT LOAM, 0 to 30 % SLOPES	0.32	3	severe
VaD	VASSAR SILT LOAM, 30 to 55 % SLOPES	0.32	3	severe
VsD	VASSAR VERY ROCKY SILT LOAM, 20 to 55 % SLOPES	0.32	3	severe

C. Slope Length (LS Values).

Percent Slope	Slope Length In Feet																				
	25	50	75	100	110	120	130	140	150	160	180	200	225	250	300	325	350	400	425	450
.50	.08	.11	.13	.16	.16	.17	.18	.18	.19	.20	.21	.22	.23	.25	.27	.28	.29	.31	.32	.33
1.0	.13	.18	.22	.25	.27	.28	.29	.30	.31	.32	.34	.36	.38	.40	.44	.46	.47	.51	.52	.54
2.0	.21	.29	.36	.41	.43	.45	.47	.49	.50	.52	.55	.58	.62	.65	.71	.74	.77	.82	.85	.87
3.0	.27	.39	.47	.55	.57	.60	.62	.65	.67	.69	.73	.77	.82	.86	.94	.98	1.02	1.09	1.12	1.16
4.0	.33	.47	.58	.67	.70	.73	.76	.79	.82	.84	.89	.94	1.00	1.05	1.15	1.20	1.25	1.33	1.37	1.41
5.0	.39	.55	.67	.78	.82	.85	.89	.92	.95	.99	1.04	1.10	1.17	1.23	1.35	1.40	1.46	1.56	1.61	1.65
6.0	.44	.63	.77	.88	.93	.97	1.01	1.05	1.08	1.12	1.19	1.25	1.33	1.40	1.53	1.59	1.65	1.77	1.82	1.88
7.0	.49	.70	.85	.98	1.03	1.08	1.12	1.16	1.21	1.24	1.32	1.39	1.48	1.56	1.70	1.77	1.84	1.97	2.03	2.09
8.0	.54	.76	.93	1.08	1.13	1.18	1.23	1.28	1.32	1.37	1.45	1.53	1.62	1.71	1.87	1.95	2.02	2.16	2.23	2.29
9.0	.59	.83	1.01	1.17	1.23	1.28	1.34	1.39	1.43	1.48	1.57	1.66	1.76	1.85	2.03	2.11	2.19	2.34	2.41	2.48
10.0	.63	.89	1.09	1.26	1.32	1.38	1.44	1.49	1.54	1.59	1.69	1.78	1.89	1.99	2.18	2.27	2.36	2.52	2.60	2.67
12.0	.71	1.01	1.24	1.43	1.50	1.56	1.63	1.69	1.75	1.81	1.91	2.02	2.14	2.26	2.47	2.57	2.67	2.85	2.94	3.03
14.0	.79	1.12	1.37	1.58	1.66	1.74	1.81	1.88	1.94	2.00	2.13	2.24	2.38	2.51	2.75	2.86	2.97	3.17	3.27	3.36
16.0	.87	1.23	1.50	1.73	1.82	1.90	1.98	2.05	2.12	2.19	2.33	2.45	2.60	2.74	3.00	3.13	3.24	3.47	3.57	3.68
18.0	.94	1.33	1.62	1.88	1.97	2.05	2.14	2.22	2.30	2.37	2.52	2.65	2.81	2.97	3.25	3.38	3.51	3.75	3.87	3.98
20.0	1.01	1.42	1.74	2.01	2.11	2.20	2.29	2.38	2.46	2.54	2.70	2.84	3.02	3.18	3.48	3.62	3.76	4.02	4.14	4.26
22.0	1.07	1.51	1.85	2.14	2.24	2.34	2.44	2.53	2.62	2.71	2.87	3.02	3.21	3.38	3.70	3.86	4.00	4.28	4.41	4.54
24.0	1.13	1.60	1.96	2.26	2.37	2.48	2.58	2.68	2.77	2.86	3.03	3.20	3.39	3.58	3.92	4.08	4.23	4.52	4.66	4.80
26.0	1.19	1.68	2.06	2.38	2.49	2.60	2.71	2.81	2.91	3.01	3.19	3.36	3.57	3.76	4.12	4.29	4.45	4.76	4.90	5.04
28.0	1.24	1.76	2.16	2.49	2.61	2.73	2.84	2.95	3.05	3.15	3.34	3.52	3.73	3.94	4.31	4.49	4.66	4.98	5.13	5.28
30.0	1.30	1.84	2.25	2.60	2.72	2.84	2.96	3.07	3.18	3.28	3.48	3.67	3.89	4.10	4.50	4.68	4.86	5.19	5.35	5.51
32.0	1.35	1.91	2.34	2.70	2.83	2.96	3.08	3.19	3.30	3.41	3.62	3.81	4.05	4.27	4.67	4.86	5.05	5.40	5.56	5.72
34.0	1.40	1.98	2.42	2.79	2.93	3.06	3.19	3.31	3.42	3.53	3.75	3.95	4.19	4.42	4.84	5.04	5.23	5.59	5.76	5.93
36.0	1.44	2.04	2.50	2.89	3.03	3.16	3.29	3.42	3.54	3.65	3.87	4.08	4.33	4.56	5.00	5.20	5.40	5.77	5.95	6.12
38.0	1.49	2.10	2.58	2.97	3.12	3.26	3.39	3.52	3.64	3.76	3.99	4.21	4.46	4.70	5.15	5.36	5.57	5.95	6.13	6.31
40.0	1.53	2.16	2.65	3.06	3.21	3.35	3.49	3.62	3.75	3.87	4.10	4.33	4.59	4.84	5.30	5.51	5.72	6.12	6.31	6.49
42.0	1.57	2.22	2.72	3.14	3.29	3.44	3.58	3.71	3.84	3.97	4.21	4.44	4.71	4.96	5.44	5.66	5.87	6.28	6.47	6.66
44.0	1.61	2.27	2.78	3.21	3.37	3.52	3.66	3.80	3.94	4.07	4.31	4.55	4.82	5.08	5.57	5.79	6.01	6.43	6.63	6.82
46.0	1.64	2.32	2.85	3.29	3.45	3.60	3.75	3.89	4.02	4.16	4.41	4.65	4.93	5.20	5.69	5.92	6.15	6.57	6.77	6.97
48.0	1.68	2.37	2.91	3.35	3.52	3.67	3.82	3.97	4.11	4.24	4.50	4.74	5.03	5.30	5.81	6.05	6.28	6.71	6.92	7.12
50.0	1.71	2.42	2.96	3.42	3.59	3.75	3.90	4.05	4.19	4.32	4.59	4.84	5.13	5.41	5.92	6.16	6.40	6.84	7.05	7.25
52.0	1.74	2.46	3.01	3.48	3.65	3.81	3.97	4.12	4.26	4.40	4.67	4.92	5.22	5.50	6.03	6.27	6.51	6.96	7.17	7.38
54.0	1.77	2.50	3.06	3.54	3.71	3.88	4.03	4.19	4.33	4.48	4.75	5.00	5.31	5.59	6.13	6.38	6.62	7.08	7.29	7.51
56.0	1.80	2.54	3.11	3.59	3.77	3.94	4.10	4.25	4.40	4.54	4.82	5.08	5.39	5.68	6.22	6.48	6.72	7.19	7.41	7.62
58.0	1.82	2.58	3.16	3.64	3.82	3.99	4.16	4.31	4.46	4.61	4.89	5.15	5.47	5.76	6.31	6.57	6.82	7.29	7.51	7.73
60.0	1.85	2.61	3.20	3.69	3.87	4.05	4.21	4.37	4.52	4.67	4.95	5.22	5.54	5.84	6.40	6.66	6.91	7.39	7.61	7.83

D. Identification and Mapping. Data sources are available from the City of Liberty Lake that are used in the mapping of the characteristics for geologically hazardous areas. The existing map sources provide a general level of information and are not intended to pinpoint erosion or landslide hazards on individual sites or properties. Specific information may be provided by the applicant that indicates characteristics are not present on the site or that the proposal is not located within nor will impact a geologically hazardous area. In addition, there may be areas not designated on City maps that exhibit the characteristics of geologically hazardous areas. It is the intent of this article to require all areas which meet the classification characteristics of geologically hazardous areas to meet the requirements of this article. Lands that meet the classification characteristics for

erosion and landslide hazard areas are mapped and used to flag areas within the City that have a high probability to meet the classification characteristics. The geologically hazardous areas maps shall be updated as more accurate information becomes available to aid the public and project reviewers. Classification characteristics are identified as follows:

1. Soil characteristics are identified as those areas containing soils which according to the U.S. Department of Agricultural Soil Conservation Service (SCS) Classification System may experience severe to very severe erosion based on a formula which is based on several factors including rainfall, slope, soil erodibility and other factors. The formula and a listing of soils which have a severe potential for erosion are listed in Section 10-6B-5, subsection "B" above. Landslide hazard areas are based on a combination of geologic, topographic (slope) and hydraulic factors and have a high susceptibility to landslides.
2. Geologic characteristics are areas identified and described by the Washington State Department of Natural Resources and include:
    a. Alluvium;
    b. Landslide deposits;
    c. Latah formation.
3. Topographic characteristics include areas with severe site topography or slopes of thirty percent or greater and have a severe potential for erosion and/or landslide hazards.
4. Other Characteristics. Hydraulic features include surface and groundwater conditions and the hydraulic changes resulting from a proposal. Uncompacted fill-areas or steep- cuts as a result of site grading, construction activities, or resource extraction.

E. Regulations. The following regulations shall be used when activities and uses as described in Section 10-6B-1, subsection "D", are located within geo-hazard areas:

1. City of Liberty Lake Municipal Code Title 9 - Building Regulations.
2. City of Liberty Lake Municipal Code Title 10 - Development Code.
3. Applicable Flood Hazard Regulations.
4. If the regulations noted above do not provide adequate mitigation of impacts as determined by the Zoning Administrator, then a geo-hazard mitigation plan prepared by a qualified landslide or erosion specialist shall be required.

F. Geo-hazard Mitigation Plan and Geo-hazard Evaluation.

1. Geo-hazard Mitigation Plans. When the Zoning Administrator determines that the impact of a use or activity located in a geo-hazard area cannot be mitigated through standards identified in Section 10-6B-5, subsection "E" above, a geo-hazard mitigation plan shall be prepared to identify construction standards for the proposal. Geo-hazard mitigation plans shall conform to City guidelines for stormwater management, or any subsequent regulation adopted by the City of Liberty Lake providing erosion and landslide protection. A geo-hazard mitigation plan, prepared by a qualified landslide or erosion specialist, shall be prepared for building permits, road construction, utilities, and storm drainage facility installations within a geo-hazard area.
2. Geo-hazard Evaluation, Preliminary Report. A geo-hazard evaluation or feasibility report shall be prepared by a qualified landslide or erosion specialist and submitted with applications for preliminary plats, short plats, PUDs, binding site plans; zone reclassifications, conditional use permits, variances, manufactured home park site plans, or topsoil removal permits located in geologic hazard areas.

The geo-hazard evaluation shall document the extent and nature of geo-hazard on the subject property and shall provide mitigating measures and an assessment of geo- hazards associated with the proposal. A more detailed geo-hazard mitigation plan may be required at the time of building permit application or actual construction approvals.

3. Subdivision Dedication Notice. Final subdivisions, short plats, and binding site plans located within geo-hazard areas shall contain language in the plat dedication to indicate lots or portions of lots that are affected by geo-hazards.

   In addition, building setback lines may be drawn on lots, parcels, and tracts so as to indicate suitable areas for construction of structures or improvements.

10-6B-6 Critical Aquifer Recharge Areas

The City of Liberty Lake designates areas and adopts development regulations for the purpose of protecting areas within the City that are critical to maintaining ground water recharge and quality. This section specifies the requirements to be enacted when regulated development within these areas is proposed to occur. This section applies to any person, firm, or corporation, which establishes or proposes to establish new, expanded, enlarged, or different land use or activity identified in Section 10-6B-6, subsection "B" below, within designated critical aquifer recharge areas in the City of Liberty Lake.

A. Designation and Rating.

1. Critical aquifer recharge areas are those areas with a critical recharging effect on aquifers used for potable water as defined by section 365-190-030(2) WAC. Critical aquifer recharge areas have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water.
2. Aquifer recharge areas are rated as having a high, moderate, or low susceptibility based on a scientific analysis of soils, hydraulic conductivity (the ease with which water moves between the surface and aquifers), annual rainfall, the depth to aquifers, the importance of the material between soils and aquifers (Vadose zone), and wellhead protection information. See Section 10-6B-6, subsection "F", for an explanation of the aquifer susceptibility map.
3. If a parcel lies within two or more susceptibility rating designations, the higher susceptibility rating designation shall apply to the whole parcel.
4. Designated wellhead protection areas and areas within a one-thousand-foot radius of wells without reported plans, are additionally treated as high-susceptibility areas. As wellhead protection plans are completed for wells, the one-thousand-foot radius placeholder will be replaced by the Washington State Department of Health-certified wellhead protection area.

B. Uses and Activities Regulated in Critical Aquifer Recharge Areas. The table below establishes the following uses and activities regulated by the requirements of this section. This table should be interpreted with the corresponding performance standards set forth in Section 10-6B-6, subsection "C".

Regulated Uses & Activities in Critical Aquifer Recharge Areas

(*some uses may not be permitted by the underlying zone, see Chapter 2 of this Code*)

USES and ACTIVITIES regulated in Critical Aquifer Recharge Areas	Aquifer Susceptibility Rating (See Aquifer Susceptibility-Map)		
	High ***	**Medium**	**Low**
Biosolids land application	N	L-1	L-1
Critical Material storage, handling, generating, or use	L-2, L-3	L-2, L-3	L-2, L-3**
Cultivation of land (commercial)	L-1	L-1	P
Dairy	L-1*	L-1	L-1
Feed lot	N	L-1	L-1
Feed mill	L-2	L-2	P
Floriculture (flower growing)	L-1	L-1	P
Grazing	L-1	L-1	P
Greenhouse - commercial	L-1	L-1	P
Horse boarding and training	L-1	L-1	P
Horticulture (vegetable growing)	L-1	L-1	P
Landfill, demolition, inert	N	L-6	L-5
Landfills (all others)	N	N	L-5
Large Animal raising and/or keeping	L-1	L-1	P
Nursery - wholesale	L-1	L-1	P
Orchard	L-1	L-1	P
Poultry-raising, commercial	N	L-1	L-l
Riding stable	L-1	L-1	P
Sanitary waste discharge	L-2, L-3	L-2, L-3	L-2, L-3
Stormwater disposal systems	L-4	L-4	L-4
Tree farming	L-1	L-1	P
Truck gardening	L-1	L-1	P
Vineyard	L-1	L-1	P

Index:

Uses and activities listed above are defined in Article 10-1C and Chapter 2 of this Code. Some uses listed here may not be permitted within the underlying zone, as defined in Chapter 2.

P = Permitted if the use is permitted in the underlying zone (see Chapter 2). N = Not permitted.

L = Limited Uses. These uses are permitted if they are allowed by the underlying zone and they comply with the standards of this section, as well as the underlying zone (see Chapter 2), and the corresponding performance standards listed in Section 10-6B-6, subsection "C" below.

* A hydrogeologic study is required for this use.

** When there are low susceptibility areas hydrologically connected to medium and high- susceptibility areas, the regulations for medium or high susceptibility areas apply. Hydrologic connection is determined by a hydrogeologic study.

*** Designated wellhead protection areas and areas within a one-thousand-foot radius of wells without reported plans, are additionally treated as high aquifer susceptibility areas.

C. Performance Standards for Uses and Activities in Critical Aquifer Recharge Areas. The following are the performance standards applicable to the uses and activities listed in the table in Section 10-6B-6, subsection "B" above. The uses and activities are defined in Article 10-1C and Chapter 2 of this Code.

L-1 Agriculture:

1. Agricultural practices that impact critical aquifer recharge areas shall be mitigated by having a conservation plan prepared and the subject property shall be required to comply with approved land management and/or conservation practices that protect groundwater, as set forth in the United States Department of Agriculture Natural Resource Conservation Service (NRCS) Technical Guides, and all local, state, and federal regulations and their amendments

governing agricultural practices. The NRCS technical guide is available at the local field office of the Natural Resource Conservation Service.

2. Agricultural practices that are accessory to a primary residential use, including animal raising and/or keeping, and that exist for the personal enjoyment of the property resident, shall be exempt, and this subsection shall be advisory only as to those accessory agricultural practices.

L-2 Critical Materials Storage, Handling, Generating or Use:

Critical materials subject to the following performance standards are set forth in the critical materials list adopted and amended pursuant to Title 9 - Building Regulations, as amended, of the City of Liberty Lake Municipal Code.

1. All facilities related to the use of critical materials shall be designed so that:
   a. Any spilled or leaked critical materials are contained on site;
   b. Any spilled or leaked critical materials cannot infiltrate into the ground; and
   c. No disposal of any waste containing critical materials shall be allowed on site.
2. Stormwater draining facilities in areas where critical material spills could occur shall be designed so that:
   a. Mingling of stormwater and spilled critical materials is prevented; and
   b. Spill cleanup procedures are enhanced.
3. Underground storage tanks used for containing critical material shall be installed and maintained according to the provisions in Title 9 - Building Regulations, as amended, of the City of Liberty Lake Municipal Code.
   a. Surface or subsurface disposal of a critical material is prohibited.

L-3 Wastewater Disposal:

1. General Performance standards. Critical material use activities that produce a process waste instead of or in addition to sanitary waste shall utilize one of the following methods for waste management and disposal:
   a. Separate waste disposal systems shall be provided so those sanitary and process wastes are handled separately. The process waste shall be disposed of by collection in sealed holding tanks and shall be transported and disposed of at a site licensed for disposal of this effluent. An agreement to dispose of process waste under this section shall be recorded in the Spokane County auditor's office and shall not be removed without approval by the City of Liberty Lake.
   b. Sanitary and/or process waste waters shall be managed in compliance with a valid authorization from a Publicly Owned Treatment Works (POTW), which shall include any required pretreatment or monitoring;
   c. Sanitary and/or process wastewaters shall be managed in compliance with a valid surface water discharge permit, which is obtained from the Washington State Department of Ecology.
2. Performance standards for new development.
   a. Public sewer services consistent with the adopted levels of service and concurrency requirements set forth in the City of Liberty Lake Comprehensive Plan and this Development Code, or as amended, are required for all new development.

L-4 Stormwater disposal.

1. Development shall provide for the treatment of stormwater run-off from impervious surfaces in a manner consistent with Article 10-3H. Stormwater Management, as amended, including the Stormwater Management Manual for Eastern Washington.
2. Direct injection wells without an associated drainage swale or drainage swale system for stormwater disposal within five hundred feet of wellhead protections areas are prohibited.

L-6 Landfill.

All landfills shall comply with Chapters 173-304 and 173-351 WAC and shall be approved by the Spokane Regional health district and the Washington State Department of Ecology.

D. Procedures for Hydrogeologic Report/Study.

When a use or activity identified in Section 10-6B-6, subsection "B" above is proposed, it shall be subject to the following:

1. The property shall be reviewed for susceptibility of the aquifer and whether mitigation measures for ground water protection are required. The aquifer susceptibility map serves as the first level for review. Section 10-6B-6, subsection "C" above establishes the minimum mitigation required.
2. The City may require an applicant to submit a hydrogeologic report if:
    a. There is insufficient groundwater information to perform an adequate review to assure aquifer protection; or
    b. There is evidence of groundwater degradation or known groundwater contamination in the vicinity of a proposed project, and the project could influence or be influenced by the water quality degradation (for example, the identified quality degradation may render the proposed water source unusable or the proposed project may add to existing quality degradation and may render some other users' water source unusable).

    An applicant may also voluntarily submit a site-specific hydrogeologic report to evaluate the aquifer susceptibility to contamination from a project site.
3. The City, in consultation with agencies of expertise, shall review and accept or reject the hydrogeologic report.
4. The City may approve or deny a proposed project based on the information in the hydrogeologic report or may adjust the aquifer susceptibility rating of the site and apply appropriate mitigation measures provided for in Section 10-6B-6, subsection "C" above.
5. A hydrogeologic report may recommend alternative mitigation measures that the City may approve, provided the measures give equal or greater protection to the aquifer.
6. A qualified geologist shall prepare the hydrogeologic report. The report shall include, but is not limited to, the following information:
    a. A site location map that depicts the site and land parcels within one thousand feet of the site. The map shall include roads, topography, existing and proposed structures and shall identify land uses within one thousand feet of the boundaries of the site.
    b. Geologic setting, including well logs and other well information for wells within one thousand feet of the boundaries of the site.
    c. Any current available data on any springs or seeps within one thousand feet of the boundaries of the site.

d. Background water quality data.

e. Water source/supply to facility.

f. Any sampling schedules necessary.

g. An analysis of aquifer susceptibility to include:

i. Soil types (from the Natural Resources Conservation Service Soil Survey of Spokane County);

ii. Hydraulic conductivity;

iii. Annual recharge;

iv. Depth to water (the depth to the water-bearing zone, not the potentiometric surface);

v. Importance of the Vadose Zone based on the geology above the aquifer;

vi. Discussion of the effects of the proposed project on groundwater resources;

vii. Discussion of potential mitigation measures if the proposed project should have an adverse impact on groundwater resources; and

viii. Other information as required by the City in consultation with other agencies of expertise.

h. Depth/location of any perched water tables or geological features that could form perched water tables if recharge is increased.

i. Groundwater flow direction and gradient.

7. An applicant may elect to meet the appropriate performance standards in lieu of preparing a hydrogeologic report if the City finds the performance standards provide adequate aquifer protection.

E. Monitoring and Reporting.

1. The Zoning Administrator may require a monitoring program as a condition of approval to document compliance with permit conditions and to determine whether the project contributes to water quality degradation.

2. Monitoring shall be by a qualified individual as determined by Zoning Administrator and shall be paid for by the applicant.

3. Staff shall periodically review monitoring programs to determine compliance with conditions of approval in cooperation with the Spokane Regional health district, Spokane aquifer joint board, and other agencies responsible for aquifer protection.

4. For critical material users, the Zoning Administrator shall establish a periodic inspection program to determine compliance with permit requirements and the provisions of this article.

F. Explanation of Aquifer Susceptibility Map - SHADI.

A method for assessing ground water susceptibility in Spokane County. Introduction.

In the language of water resources management, the term vulnerability describes the potential risk for the contamination of an aquifer. Vulnerability depends on two factors: aquifer susceptibility (the level of ground water protection provided by the natural environment) and the pollution potential (land use activities above the aquifer). This document describes the development and

application of a susceptibility model for Spokane County.

The SHADI ground water susceptibility model is based on the same general approach as the DRASTIC model. DRASTIC is a model developed by the National Water Well Association in cooperation with the U.S. EPA (Aller, L., et al, 1987). DRASTIC has been used in its original and modified form in most areas of the United States (Swanson, R., 1994; Palmquist, R., 1991). The SHADI modification developed for use in Spokane County uses the following five environmental characteristics to assess susceptibility:

Soil Media
Hydraulic Conductivity
Annual Recharge
Depth to Ground Water
Importance of the Vadose Zone

To use the SHADI model data, each of the five characteristics must be mapped at a common level of resolution. Collecting the required data is a time-consuming process if summary data in map or tabular form is not available for the characteristics. For Spokane County, simplifying the model to five elements greatly reduces the work required to develop the model without losing the ability to resolve differences in susceptibility. These five characteristics reflect essentially the same range of variability that the seven DRASTIC characters would reflect when applied to Spokane County. The result of applying the SHADI model is a set of "susceptibility ratings," usually presented in map form, for discrete geographic units in the study area. The following relationship is used to calculate the final susceptibility value:

Aquifer Susceptibility = $(S \times W_s) + (H \times W_h) + (A \times W_a) + (D \times I)$
Where S, H, A, D, and I are described above and W_s, W_h, and W_a are weighting factors to bring the relative importance of soil, hydraulic conductivity, and annual recharge into balance with the depth to water--vadose zone term. Both the ranking values and weighting values used in SHADI are consistent with those used in DRASTIC.

Aquifer susceptibility using methods like SHADI can be applied "manually" by mapping the various characteristics on tissue paper, overlaying the maps of the characteristics, tracing the boundaries of areas with a unique set of characteristics, and manually totaling the ratings for each area. However, this process is easily accomplished using Geographic Information System computer software. The SHADI data sets for Spokane County will be developed in a format that will allow the automated delineation of "unique area" boundaries and the totaling of the final susceptibility rating for those areas.

Like DRASTIC, SHADI is intended to establish the relative risk to contamination that exists for aquifers examined using a consistent database. The model results from one "study" should not be compared with those from another. Similarly, once a study area has been defined it should be treated as a whole. Breaking a study area into subsets requires a reassessment of the ratings applied.

Explanation of Ratings shown on SHADI Map Layers.

Soil Media.

SHADI Ratings for Soil type.

For most purposes, soil is considered to be that part of the earth's surface in which plants grow. The soil layer extends from the land surfaces to the bottom of the root zone - the depth to which plant roots extend. The soil zone is characterized by high biological activity. In a semi-arid climate like that around Spokane a root zone of 5 to 6 feet is common. For most contaminant discharges within an aquifer recharge area the soil is the first line of defense against contamination. Many of

the biochemical actions that take place in the soil can destroy potentially harmful wastes, result in their removal by plants or lead to their being bound up as part of the soil matrix. Most of these processes depend on the amount of clay, silt and organic material in the soil. High levels of one or more of these components lead to better ground water protection. Table 1 provides a summary of the SHADI ratings for the soil types common in Spokane County.

Table 1. SHADI Ratings for Soil Type	
Soil Type	**SHADI Rating**
Silty Loam	3
Sandy	6
Rocky/Gravelly	9
Weighting Factor	2

Hydraulic Conductivity.

SHADIR Ratings for Hydraulic Conductivity.
Hydraulic conductivity refers to the ease with which water moves through the aquifer media. This is dependent on the amount of interconnected void space in the aquifer. Loose sand and gravel or highly fractured rock have the highest hydraulic conductivity. Aquifers with high hydraulic conductivity more easily disperse contaminants away from the point where they enter the ground water. Table 2 provides a summary of the SHADI ratings for the hydraulic conductivity of the common aquifer types found in Spokane County.

Table 2. SHADI Ratings for Hydraulic Conductivity	
Hydraulic Conductivity (feet/sec)	**SHADI Rating**
High > 0.025	10
Medium High 0.001 - 0.025	8
Medium 0.00025 - 0.001	6
Medium Low 0.00001 - 0.00025	4
Low < 0.00001	2
Weighting factor:	6

Annual Recharge.

SHADI Ratings for Annual Recharge.
The amount of water recharged to an aquifer is an important element in assessing ground water susceptibility because it is the recharge water that carries contaminants to the ground water. In general, the greater the amount of recharge, the greater the potential impact. Because precipitation, as with all climatic characteristics, varies greatly from year to year, annual recharge also varies greatly. For long term planning purposes using “average” values for precipitation to calculate recharge should produce good results for tracking potential ground water impacts and estimating the amount of water available for use. However, recharge levels at both extremes can skew the overall impact. Extremely high recharge may dilute the concentration of contaminants to below the background levels in ground water. Conversely, extremely low recharge over a period of time may result in the accumulation of contaminants in the soil. A normal or above normal recharge period could then flush these contaminants into ground water in a short period of time. The susceptibility rating values associated with various levels of recharge found in Spokane County are summarized in Table 3

Table 3. SHADI Ratings for Annual Recharge	
Annual Recharge (inches)	**SHADI Rating**
2-4	3
4-7	6
7-10	8
10+	8
Weighting factor:	4

Depth to Water

SHADI Ratings for Depth to Water

Depth to water is important in establishing the susceptibility of an aquifer because it determines the thickness of the material through which contaminated water must travel before it reaches ground water. In general, the more material contaminated water moves through the greater the probability that some or all of the contaminants will be removed. A number of physical (e.g. filtration of suspended solids), chemical (e.g. precipitation of phosphorus) and biological (bacterial breakdown of organic chemicals into CO2 and water) may affect the contaminants in recharge water. In addition to the amount of material that the water must pass, deeper water tables usually mean longer travel times, The longer the travel time, the greater the opportunity for contaminant removal. Table 4 provides a summary of the SHADI ratings for the several depth to water ranges found in Spokane County.

Table 4. SHADI Ratings for Depth to Water	
Depth to Water - feet	**SHADI Rating**
0-15	10
15-50	8
50-100	6
100+	4
Weighting factor:	Importance of the Vadose Zone

Importance of the Vadose Zone

SHADI Ratings for Importance of the Vadose Zone

The vadose zone is the unsaturated zone between the bottom of the root zone and the water table. As a rule, the vadose zone is composed of material similar to that found in the soil or that which contains the aquifer. Because it is below the root zone there is little biological activity under ordinary conditions, so while the vadose zone is important for some of the same reasons it is likely to be less effective than soil. As indicated above, the finer the material the better the vadose zone is at removing contaminants. Where the vadose zone is composed of “solid” rock, the size of cracks and fractures and the complexity of the fracture zone determines the contaminant removal ability. The main difference between SHADI and DRASTIC lies in how the nature of the material in the vadose zone is accounted for in the model. Not all materials behave the same ability to retain contaminants or facilitate their decomposition; silty materials will retain more water and hold it longer than coarse gravel. The larger surface area exposed by finer materials usually increases the amount of contaminants that can be removed. In SHADI the Importance of the Vadose Zone is used as a “weighting factor” for Depth to Water. Under this scheme a thick layer of coarse material may be a poorer buffer to contamination than a thin layer of finer soil. Where there are “confining layers” between the land surface and the water table these zones increase the removal of contaminants by providing longer travel times and providing a zone of fine material that increases contaminant removal. Table 5 provides a summary of the SHADI ratings for the vadose zone materials common in Spokane County.

Table 5. SHADI Ratings for Importance of the Vadose Zone	
Material	**SHADI Rating***
Clay and Metasedimentary rock	2
Silt and Crystalline rock	4
Weathered basalt	6
Sand	8
Flood gravels	10
Weighting factor:	Depth to Water

*Subtract 1 for each confining layer up to 2.

Results from the application of SHADI

The product of the analysis of ground water susceptibility using SHADI is a set of six maps. Maps one through five depict the characteristics of the environment considered by SHADI. Map six is the susceptibility rating itself. Maps one through five are based on 1) existing mapped data, 2) interpretation of well drillers' logs and 3) a combination of the above. Soil and Annual Recharge are taken from the mapping contained in the Spokane County Soil Survey (Donaldson and Giese, 1968) and annual precipitation maps prepared by the National Weather Service (NOAA, 1990). These maps probably represent the range of resolution for the mapping. The Soil Survey maps show variations in soil type for parcels as small as five acres. Annual precipitation at any given point in Spokane County varies greatly from year to year. The precipitation map, and therefore the annual recharge map, cannot show this variation. The areas of equal annual recharge can move a mile to the east or west from year to year. The resolution of the annual recharge map is good in the center of the ranges and poor at the edges. This means that the resolution of this factor ranges from 640 acres to 2560 acres. Hydraulic Conductivity is derived from tests on individual wells penetrating the various ground water bearing formations. The distribution of Hydraulic Conductivity in the various ground water units is based on both the individual well information and the existing geology maps, which delineate the areas in which aquifers with similar characteristics might be found. Given the level of detail in the geology maps, the amount of individual well data used and the range of values for hydraulic conductivity employed in SHADI the resolution of this mapping is estimated to be about 160 acres.

Depth to Water for most of the urbanizing area of the county is derived from special studies that show considerable detail. The resolution of this characteristic for these areas is about 40 acres. For the rest of the county the information for Depth to Water was derived in the same manner as Hydraulic Conductivity and thus has a resolution of about 160 acres. Importance of the Vadose Zone is based on a recently completed geologic map of Spokane County (Johnson, 1997). The resolution of this map is about 40 acres. The Geographic Information System (GIS) used a GRID process to calculate the susceptibility rating. The grid process divides the 5 source maps into squares that are the same size and positions throughout the whole county. The values (rate times weight) of the stacked squares in all 5 layers are added together for the final susceptibility rating. The GRID process was programmed to use squares 300 feet on a side (2.1 acres).

SHADI rating areas less than 40 acres in size were combined with adjacent areas to create the final SHADI rating map.

AQUIFER SUSCEPTIBILITY MAP

SHADI Rating Map revised to create Aquifer Susceptibility Map

The SHADI rating map was revised to create the Aquifer Susceptibility Map by adding additional areas to coordinate wellhead protection throughout Spokane County. The Washington State Department of Health provided the data for wellhead protection coordination based on site specific (well specific) determination of susceptibility of contamination to wells. The data includes

designated wellhead protection areas and areas within 1,000-foot radius of Group A community and Group A community transient wells without reported plans. As wellhead protection plans are completed for wells, the 1,000-foot radius placeholder will be replaced by the Washington Department of Health-certified wellhead protection area. These areas are treated as high aquifer susceptibility areas. It is the intent of the Aquifer Susceptibility Map to coordinate the wellhead protection program with protection of critical aquifer recharge areas. Uses and activities within designated wellhead protection areas subject to critical aquifer recharge area regulations are required to meet the standards for high aquifer susceptibility. However, applicants have the opportunity to provide evidence to support a low or medium aquifer susceptibility rating by means of a hydrogeologic report. The City, in consultation with agencies of expertise, shall review and accept or reject the hydrogeologic report. The Aquifer Susceptibility Map will be revised as required to display updated date on wellhead protection areas received from the Washington State Department of Health.

10-6B-7 Additional Resources

A. Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987), as amended.

B. Washington State Wetlands Rating System for Eastern Washington, as amended.

C. Classification of Wetland and Deep-Water Habitats of the United States (1979), as amended.

D. Management Recommendations for Washington's Priority Habitats and Species (1991), as amended.

E. Washington Priority Habitats and Species (1993), as amended.

10-6B-8 Incentives

A. Property Tax and Income Tax Advantages.

1. Property Tax Relief. The Spokane County Assessor shall consider the wetlands and wetland buffer areas, fish and wildlife habitat conservation areas, and geologically hazardous areas contained within this article when determining the fair market value of land.

   Any owner of a wetland, wetland buffer area, fish and wildlife habitat conservation area who has dedicated a conservation easement or entered into a perpetual conservation restriction with a department of the local, state, or federal government; or a nonprofit organization to permanently control some or all the uses and activities within these areas may request that the Spokane County assessor reevaluate that specific area consistent with those restrictions and provisions of open space land current use taxation.

2. Federal Income Tax Advantages. There are significant federal income tax advantages that can be realized by an individual or estate for gifts of real property for conservation purposes to local governments or non-profit organizations such as land trusts. The specific rules on federal income tax deductions can be found in Section 170 of the Internal Revenue Code.

B. On-Site Density Transfer. Residential density may be transferred from a wetland, wetland buffer area or buffer area which is required to protect priority habitats, species areas, or geologically hazardous areas. On-site residential density transfer shall be determined by the zone classification of the property. The use of on-site residential density transfer or clustering and use

of the planned unit developments (PUDs), and bonus density is encouraged as a means to protect and preserve wetlands, wetland buffers, and fish and wildlife habitat conservation areas. The provisions of this Development Code shall control the use of on-site density transfer or clustering, the use of planned unit developments (PUDs), and bonus density.

C. Transfer of Development Rights. If a site contains a regulated wetland, wetland buffer, or buffer area which is required to protect priority habitats or species areas or geologically hazardous areas, a person may transfer residential development rights (TDR) by meeting the following criteria:

1. The TDR must be associated with a complete planned unit development (PUD) residential development application filed with the City for the receiving site(s). The TDR request shall be included in the application.
2. The hearing body shall consider the request for TDR at the public hearing for the land use proposal for the receiving site.
3. To assure that the sending site (wetland, wetland buffer, priority habitat or species areas or geologically hazardous areas) is adequately protected, a restriction shall be placed on the deed of the pending designated areas. This restriction shall be required regardless of the number of dwelling units for which development rights are transferred. A memorandum of agreement (MOA) between the applicant and the City shall be recorded with the Spokane County auditor. The MOA shall refer to all deed restrictions and restrictions on activities in the designated area.
4. If the designated area is degraded as a result of human or agricultural activity, the applicant may be required to enhance the designated area according to an enhancement plan approved by the department.
5. Except for required enhancement, the designated area shall remain in a natural condition. This shall be indicated by a note on the face of any final plat, final site plan, or other final approval for activity on the sending site. In the case of a formal subdivision, the designated area shall be placed in a separate tract.
6. TDR may go to more than one receiving site; however, this shall not increase the total number of transferred dwelling units which are allowed.
7. TDR shall be allowed only if the land use proposal on the receiving site(s) is designed in such a way that the increased density:
    a. Is consistent with any land use plan associated with the receiving site and with goals, purposes, and intents of the zoning designation of the receiving site; and
    b. Is compatible with existing and likely future developments in the vicinity; and
    c. Adequately addresses infrastructure, natural constraints, and other constraints, and does not result in significant environmental impacts.
8. The TDR shall not be approved until final plat approval or other required final approval for the receiving site is granted by the City of Liberty Lake.
9. The TDR shall meet the requirements in Section 10-6E-1 below.

Article 10-6C — Wellhead Protection

Reserved for Wellhead Protection documents adopted by the City.

At the time of adoption of this Development Code, wellhead protection responsibility has been held by the Liberty Lake Sewer & Water District; however, the City has expressed concerns about the protection of our public water system. The Liberty Lake Sewer & Water District adopted the Spokane Aquifer Joint Board Wellhead Protection Program in 1997 with an individual water purveyor contingency / emergency plan for the Liberty Lake area contained in Appendix Q-8 of the document. Chapter 7 of the document states that individual purveyor contingency plans should be updated and approved by water purveyor's elected officials every five years. The contingency plan is currently outdated, and the City may take the necessary steps in the future to update this plan or modify it to address the community's future needs, in order to reflect the current Liberty Lake community.

Article 10-6D — Shoreline Management

Consult with the City of Liberty Lake for more information on the City's adopted Shoreline Management Program.

Article 10-6E — Environmental Conservation

Sections:

10-6E-1 **Transfer of Development Rights**

10-6E-2 **Conservation Futures Program**

10-6E-1 Transfer of Development Rights

A. Purpose. The purpose of this section is to implement the comprehensive plan and encourage the protection of open spaces through Transfer of Development Rights. Transfer of Development Rights (TDR) allows individuals to purchase and sell residential development rights from lands that provide a public benefit. Such lands include forest, open space, regional trails, and habitat for threatened or endangered species. Landowners receive financial compensation without developing or selling their land and the public receives permanent preservation of the land. Transferred development rights can be used to build additional houses on other parcels in more appropriate areas within the City. The program reduces the development potential in the "sending area" and transfers that development opportunity to a "receiving area". The sending area property owner is paid to keep the land undeveloped, while the receiving area property buys the credit, allowing additional development beyond what zoning allows in the receiving area. The Transfer of Development Rights (TDR) Program should be implemented on a regional basis with participation from Spokane County.

B. Determination of Number of Development Rights. The zoning of a parcel and its size are used to calculate the number of development rights that are attached to a parcel. The acreage that can be used to determine the number of development rights is the area of the parcel minus the amount in submerged lands and any land being retained for development on site, based on the zoning requirements. The number of development rights that a particular parcel qualifies for will depend on the specifics of the situation and would be determined on a case-by-case basis during the qualification process.

C. Transfer Authorized. Allowed development rights may be transferred from one portion of a property to another portion of the same property, or from one property to another property. A transfer of development rights shall not be approved unless it meets one or more of the criteria in 1-4 below, and it conforms to subsections D-E:

1. Protection of critical areas either by dedication to the public or a land trust, or by a non-revocable conservation easement; or
2. Dedication of land to the public for park or recreational purposes; or
3. The density transfer is used to develop a mix of single family and multi-family housing on the same property or development site.

D. Prohibited Transfers. Development rights shall not be transferred from: land proposed for street right-of-way, stormwater detention facilities, private streets, and similar areas which do not provide open space or recreational values to the public.

E. Transfer Rules. All density transfers shall conform to all of the following rules:

1. Allowed housing units shall be transferred only to buildable lands (“receiving areas”). The

number of allowed housing units shall be reduced on properties from which density is transferred ("sending areas") based on the number of housing units transferred. The new number of housing units allowed on the sending area shall be recorded on a deed for the property that runs with the land. The deed shall state that the number of allowed housing units is subject to review and approval by the City, in accordance with current zoning and development codes;

2. The number of units which can be transferred is limited to the number of units which would have been allowed on 50 percent of the unbuildable area if not for these regulations; and
3. The total number of housing units per property or development site shall not exceed 100 percent of the maximum number of units per net acre permitted under the applicable comprehensive plan designation.
4. All density transfer development proposals shall comply with the development standards of the applicable zoning district.

10-6E-2 Conservation Futures Program

A. Purpose and Applicability. "Conservation Futures" is a property tax on all lands within Spokane County, enabled by the Washington State Legislature in 1971. Spokane County adopted and began a local program in 1994. Spokane County's Conservation Futures Program is intended to protect, preserve, maintain, enhance, restore, limit the future use of or otherwise conserve selected open space land, farmland, forests, wetlands, wildlife habitats, and other lands having significant recreational, social, scenic, or aesthetic values within the boundaries of Spokane County. Acquired properties will not be developed but kept in an enhanced natural area consistent with the Revised Code of Washington (RCW Chapter 84.34). As a jurisdiction within Spokane County, the City of Liberty Lake will participate in this program when possible. Conservation Futures funds are used towards acquisition of property and/or property easements that ensure public access and enjoyment of our greatest resources in perpetuity.

B. Program Implementation. The Conservation Futures program shall be implemented through the process adopted by the Spokane County Parks Department. The process includes:

1. Submittal of Nomination - Review by Parks Staff and Recommendation of Nominated Sites for consideration by the Lands Subcommittee
3. Holding of Public Meetings to Review Final Nomination List
4. Conducting Property Tours, Inspections, and Preparing Evaluation Scoring
5. Preparation of the Priority Acquisition List and review by the Spokane County Parks Advisory Committee (PAC)
6. Final review and approval by Board of County Commissioners

C. Evaluation Criteria. As outlined in the Spokane County Parks Conservation Futures implementation program, the nomination submittal forms request certain types of information to assist the Lands Subcommittee in determining many key factors in assigning a point value to the property. To assist the Subcommittee in selecting the property(s) that ensure public access and enjoyment of the greatest resources they will visit each site to evaluate the nominated property using a set list of standard quantitative criteria with a point system. The criteria assigns points in considering the identified need for open space within the area, whether the nominated property owner(s) is willing to donate to an endowment fund for the long-term maintenance of the property

and does it contain any major environmental concerns. Evaluation criteria considers the size of the property, its' riparian/wetland habitat and/or corridor values or critical links to such along with the ability for the public to access water systems. Other questions address whether the property serves as a buffer to development, the potential threat of loss to development and the degree of demonstrated public support for the acquisition. The nominated property will be evaluated for its ease of access to the public and whether it will likely become a destination for various types of public uses.

Article 10-6F — Flood Damage Prevention

Sections:

10-6F-1 **General Provisions**

10-6F-2 **Administration**

10-6F-3 **Provisions for Flood Hazard Reduction**

10-6F-1 General Provisions

A. Lands to Which These Regulations Apply.

These regulations shall apply to all areas of special flood hazards within the jurisdiction of City of Liberty Lake.

B. Basis for Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Spokane County "dated July 6, 2010, and any revisions thereto, with an accompanying Flood Insurance Rate Map (FIRM), and any revisions thereto, are hereby adopted by reference and declared to be a part of these regulations. The Flood Insurance Study and the FIRM are on file at 22710 E Country Vista Drive, Liberty Lake, Washington 99019. The best available information for flood hazard area identification as outlined in §10-6F-2(C)(2) of this Article shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under §10-6F-2(C)(2) of this Article.

C. Interpretation.

In the interpretation and application of these regulations, all provisions shall be:

1. Considered as minimum requirements;
2. Liberally construed in favor of the governing body; and,
3. Deemed neither to limit nor repeal any other powers granted under State statutes.

10-6F-2 Administration

A. Establishment of Development Permit

1. Development Permit Required

   A development permit shall be obtained before construction or development begins within any area of special flood hazard established in §10-6F-1(B) of this Article. The permit shall be for all structures including manufactured homes, as set forth in the "Definitions," and for all development including fill and other activities, also as set forth in the "Definitions."

2. Application for Development Permit

   Application for a development permit shall be made on forms furnished by the City of Liberty Lake and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill,

storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

a. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures recorded on a current elevation certificate (FEMA Form 81-31) with Section B completed by the local official.

b. Elevation in relation to mean sea level to which any structure has been floodproofed;

c. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet floodproofing criteria in §10-6F-3(B)(2);

d. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

B. Designation of the Local Administrator

The Zoning Administrator, or his/her designee is hereby appointed to administer and implement the provisions of this Article by granting or denying development permit applications in accordance with its provisions.

C. Duties & Responsibilities of the Local Administrator

Duties of the (Local Administrator) shall include, but not be limited to:

1. Permit Review

a. Review all development permits to determine that the permit requirements of these regulations have been satisfied.

b. Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.

c. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of §10-6F-3(D)(1) are met.

d. Review all development permits to determine that the site is reasonably safe from flooding.

2. Use of Other Base Flood Data (In A and V Zones)

When base flood elevation data has not been provided (in A or V Zones) in accordance with §10-6F-1(B), *Basis for Establishing the Areas of Special Flood Hazard*, the (Local Administrator) shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer §10-6F-3(B), *Specific Standards*, and §10-6F-3(D), *Floodways*.

3. Information to be Obtained and Maintained

a. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in paragraph (C)(2) of this section, obtain and record the actual (as-built) elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement, with said information recorded on a current elevation certificate (FEMA Form 81-31) with Section B completed by the local official.

b. For all new or substantially improved floodproofed nonresidential structures where base flood elevation data is provided through the FIS, FIRM, or as required in paragraph (C)(2) of this section:

i. Obtain and record the elevation (in relation to mean sea level) to which the structure was floodproofed; and,

ii. Maintain the floodproofing certifications required in paragraph (A)(2)(c) of this section.

c. Certification required by Section §10-6F-3 (D) (floodway encroachments).

d. Records of all variance actions, including justification for their issuance.

e. Improvement and damage calculations.

f. Maintain for public inspection all records pertaining to the provisions of these regulations.

4. Alteration of Watercourses.

a. Notify adjacent communities and the Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

5. Interpretation of FIRM Boundaries.

Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (e.g. where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program.

D. Conditions for Variances from Flood Elevation Standards.

1. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood level. As the lot size increases the technical justification required for issuing the variance increases.

2. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

3. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

4. Variances shall only be issued upon:

a. A showing of good and sufficient cause;

b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;

c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

5. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances.

They primarily address small lots in densely populated residential neighborhoods. As such, variances from flood elevations should be quite rare.

6. Variances may be issued for non-residential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subparagraph 2, above, and otherwise complies with paragraphs 1, 3 and 4 of §10-6F-3(A) of the General Standards.
7. Any applicant to whom a variance is granted shall be given written notice that the permitted structure will be built with its lowest floor below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk.

10-6F-3 Provisions for Flood Hazard Reduction

A. General Standards

In all areas of special flood hazards, the following standards are required:

1. Anchoring
   a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
   b. All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors. For more detailed information, refer to guidebook, FEMA-85, “Manufactured Home Installation in Flood Hazard Areas.
2. Construction Materials and Methods
   a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
   b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
   c. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Locating such equipment below the base flood elevation may cause annual flood insurance premiums to be increased.
3. Utilities
   a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems;
   b. Water wells shall be located on high ground that is not in the floodway;
   c. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
   d. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

4. Subdivision Proposals

    a. All subdivision proposals shall be consistent with the need to minimize flood damage;

    b. All subdivision proposals shall have public utilities and facilities, such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage;

    c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage;

    d. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

5. Review of Building Permits

    Where elevation data is not available either through the Flood Insurance Study, FIRM, or from another authoritative source (§10-6F-2(C)(2)), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.

B. Specific Standards

In all areas of special flood hazards where base flood elevation data has been provided as set forth in §10-6F-1(B), *Basis for Establishing the Areas of Special Flood Hazard*, or §10-6F-2(C)(2), *Use of Other Base Flood Data.*

1. Residential Construction

    a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation (BFE).

    b. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

        i. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

        ii. The bottom of all openings shall be no higher than one foot above grade.

        iii. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

    c. Subgrade crawl spaces are prohibited unless the following conditions are met:

        i. The interior grade of a crawlspace below the base flood elevation must not be more than two feet below the lowest adjacent exterior grade.

        ii. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, must not exceed four feet at any point.

iii. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas (refer to FEMA Technical Bulletin 11-01, page 7, Guidance for Pre-Engineered Crawlspaces). This limitation is intended to prevent these crawlspaces from being converted into habitable spaces.

iv. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity or mechanical means.

v. The velocity of floodwaters at the site should not exceed five feet per second for any crawlspace. For velocities in excess of five feet per second, other foundation types should be used.

vi. Below-grade crawlspace construction in accordance with the requirements listed above will not be considered basements.

2. Nonresidential Construction

   a. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

   b. Be floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

   c. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

   d. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the official as set forth in §10-6F-2(C)(3)(b);

   e. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in §10-6F-3(B)(1)(b).

3. Manufactured Homes

   All manufactured homes in the floodplain to be placed or substantially improved on sites shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

4. Recreational Vehicles

   Recreational vehicles placed on sites are required to either:

   a. Be on the site for fewer than 180 consecutive days, (or)

   b. Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently

attached additions; or

c. Meet the requirements of §10-6F-3(B)(3) above and the elevation and anchoring requirements for manufactured homes.

C. AE and A1-30 Zones with Base Flood Elevations but No Floodways

In areas with base flood elevations (but a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

D. Floodways

Located within areas of special flood hazard established in §10-6F-1(B) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that can carry debris, and increase erosion potential, the following provisions apply:

1. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.
2. Construction or reconstruction of residential structures is prohibited within designated floodways, except for:
    a. Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and,
    b. Repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either:
        i. Before the repair, or reconstruction is started, or
        ii. If the structure has been damaged, and is being restored, before the damage occurred.
    c. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or to structures identified as historic places, may be excluded in the 50 percent.
3. If §10-6F-3(D)(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of §10-6F-3, *Provisions for Flood Hazard Reduction.*