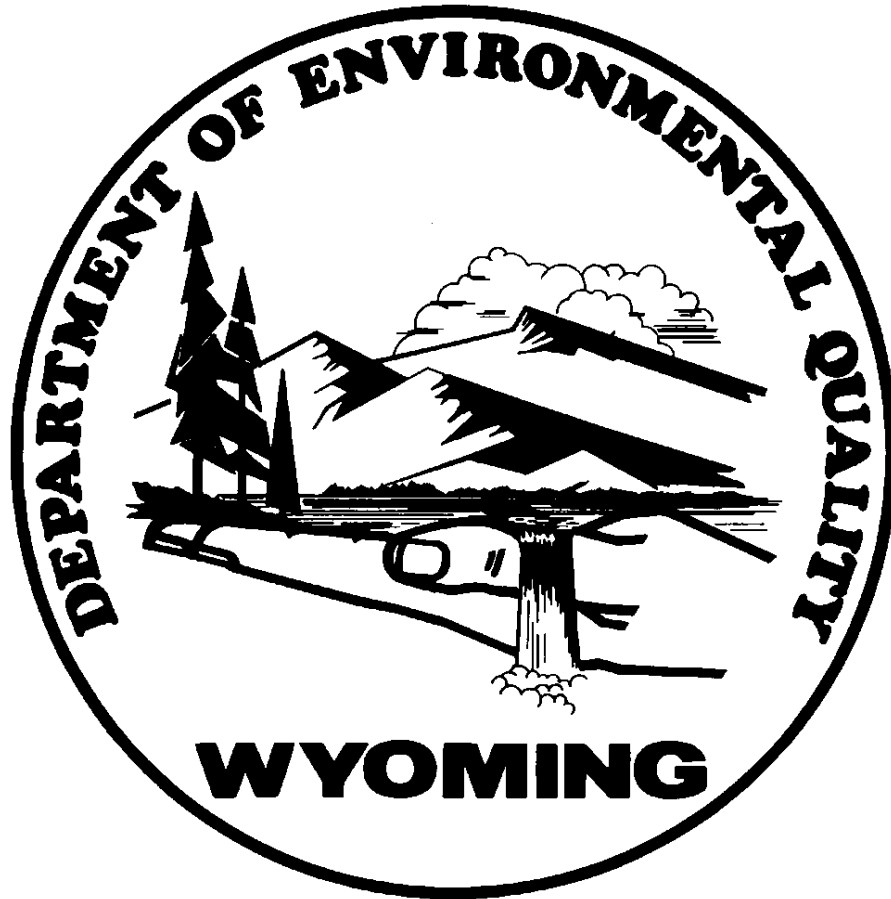


**DEPARTMENT OF ENVIRONMENTAL QUALITY
LAND QUALITY DIVISION**



GUIDELINE NO. 16

**Noncoal:
LICENSE TO EXPLORE FOR MINERALS BY DOZING**

Introduction:

- This guideline outlines the application requirements and performance standards for Licenses to Explore by Dozing. Licenses to Explore (LE's) are authorized under W.S. §35-11-413 and 414 and Chapter 5 of WDEQ-LQD Non-Coal Rules and Regulations. Application Forms (LQD Form 4) are available on the WDEQ-LQD website: <http://deq.state.wy.us/lqd/>.
- Persons desiring to conduct recreational mineral exploration involving **minor surface disturbances** (on Federal Lands this designation corresponds to “casual use” under BLM 43 CFR 3809 regulations) should refer to WDEQ/LQD Guideline 19. Generally, minor surface disturbances and casual use includes hand panning or dredging with a suction hose diameter no greater than 3” diameter and with a motor with horsepower (hp) no greater than 10 hp.
- Any person planning to conduct minerals exploration by dozing (trenching) using motorized equipment or using a suction dredge whose intake diameter is greater than 3” or whose motor is greater than 10 hp is required to first obtain a License to Explore by Dozing (using Guideline 16, this document). Exploration Drilling can also be authorized under a License to Explore. The performance standards applicable to exploration by drilling are contained in Chapter 8 of WDEQ-LQD Non-Coal Regulations.
- Any person planning to conduct exploration operations must have the right and power by legal estate owned to conduct exploration operations on the lands identified in the application. Permission must be obtained from the appropriate surface owners and land management agencies for all exploration activities, including access roads. The WDEQ-LQD does not maintain land ownership records. Federal land managing agencies (BLM and USFS) will generally require the applicant to submit a Notice of Intent or a Plan of Operations (PoO) for any proposed exploration activities that utilize motorized equipment or explosives on federal lands. Refer to Attachment A for a listing of the BLM and USFS offices. If a PoO is prepared for proposed exploration activities, the PoO can function as the required appendices (A – F) for a License to Explore, provided the PoO addresses all the necessary topics. It is preferable to have one document that satisfies all involved regulatory agencies.
- Before a License to Explore is issued, the applicant will be required to post a reclamation performance bond in an acceptable form and in the amount that the LQD determines necessary to insure the reclamation of all lands to be affected. If the exploration will be on Federal lands, a joint reclamation bond will be held by LQD. Instructions describing the various acceptable bonding instruments are available on the WDEQ-LQD website.
- Licenses to Explore are issued for a one year period and must either be reclaimed or a renewal application must be filed prior to the end of the annual period.
- If the proposed exploration program will affect 40 acres or more within four contiguous sixteenth sections (¼ ¼'s) then the applicant must obtain a mining permit rather than a License to Explore (LE).
- A License to Explore does not authorize the production or sale of minerals. Only those materials necessary for assay and testing purposes may be removed from the exploration area.
- Applicants may request that all or portions of the application be held confidential pursuant to W.S. §35-11-1101.
- Applicants are strongly encouraged to meet with the appropriate LQD District staff prior to submitting an application for a License to Explore.

WDEQ/LQD GUIDELINE 16 - TABLE OF CONTENTS

Introduction	2
License to Explore Contents	3-8
LQD Form 4.....	3
Appendices A – D.....	3
Appendix E (Project Map)	4
Appendix F (Exploration Plan and Reclamation Plan).....	4-7
Reclamation Bond Estimate.....	7
Sage Grouse Considerations.....	7-8
Annual Report and License Renewal.....	8
License Termination and Release of Bond.....	8
Attachments	9-10
Attachment A (Other Agency Contacts).....	9
Attachment B (Wyoming Class 1 Waters).....	10

.....

License to Explore (LE) Application Contents:

1. **LQD Form 4**, filled out, with original signatures, and executed by the applicant. Note that all pages of the form must be initialed and dated by the applicant. A \$25 filing fee must accompany the application. All operations conducted on an approved Exploration by Dozing license are limited to only those operations conducted by the applicant. No “sub-licenses” or “sub-applicants” are allowed under an LQD license.

2. **Appendix A:** List of names and addresses of the owners of record of the surface estate of the lands to be affected, including access routes. If the operation is to be located on federal surface, the applicant must contact the appropriate federal agency for their approval. The Land Quality Division (LQD) requires concurrence from the federal surface management agency before approval and authorization to conduct exploration.

3. **Appendix B:** List of Names and addresses of the owners of record of the mineral estate of the lands to be affected. If the operation is to be located on federal surface, the applicant must contact the appropriate federal agency for their approval. The Land Quality Division (LQD) requires concurrence from the federal surface management agency before approval and authorization to conduct exploration.

4. **Appendix C:** Legal description of the lands included in the project area by legal subdivision (1/4 ¼ Section, Township, Range).

5. **Appendix D:** Description of the affected lands and environment in the project area.
 - a. Topography;
 - b. Geology, including a description of the target minerals;
 - c. Surface water and groundwater (see *NOTE below);
 - d. Vegetation (existing vegetation should be described in writing and with photos). NRCS information may be used but must be accompanied by site-specific photos;

- e. Past and present land uses;
- f. Overburden, including thickness to be removed and stockpiled for reclamation;
- g. Topsoil, including depth to be salvaged and stockpiled for reclamation. NRCS information may be used but must be accompanied by site-specific soil test-pits and photos;
- h. Wildlife (see Section 10 below for instructions on addressing Sage Grouse);

*NOTE: No mechanical (or recreational) exploration is allowed within the wet portions of any Class 1 stream (See Attachment B for a listing of Class 1 streams in Wyoming.) LE applications for areas adjacent to a Class 1 Stream must adhere to the expectations as described below and they must also submit the following authorizations: 1) coverage under WQD’s general storm water permit, 2) approval of a “Notice of Intent for Industrial Activities” from WQD, 3) approval from U.S. Army Corps of Engineers (if applicable, see †below), 4) approval from the Wyoming State Engineer Office (if applicable, see ††below). Refer to Attachment A for Other Agency Contact Information for WQD, ACE, and SEO contact information.

†All mining and exploration activities within drainages and wetlands in Wyoming are subject to regulation by the Army Corps of Engineers (ACE). Please note the ACE does not need to be contacted if the activity only involves recreational dredging or placer mining.

††A permit may be required from the Wyoming State Engineer Office (SEO). The applicant must discuss all exploration, processing or washing plans directly with the SEO. A copy of all written correspondence between the applicant and the SEO should be submitted to the LQD in the LE application.

6. **Appendix E (Project Map):** Provide a USGS 7.5 minute topographic map or equivalent, or larger scale map, to include the following information:

- a. Applicant’s name, township, range and section lines, scale, north arrow, legend;
- b. Outline of the lands included in the exploration project area, as described in Appendix C;
- c. Access routes, including road sections to be constructed or upgraded, and locations where culverts or drainage crossings are planned;
- d. Planned trench locations, drill hole locations and an outline of all lands to be affected;
- e. Surface drainages, ponds, springs and water wells;
- f. Pipelines, power lines, utility corridors, fences;
- g. Buildings and structures;
- h. Previous exploration or mining disturbances;
- i. Water wells or oil and gas wells;
- j. Existing roads and trails;

7. **Appendix F (Exploration and Reclamation Plans):**

Exploration Plan to include the following:

- a. Description of access roads to be used, constructed, or upgraded, including culverts and drainage crossings. Mechanized equipment operations are only allowed in the dry portions of a stream channel. At no time is equipment allowed to operate in standing or flowing surface water (except for suction dredges). Personnel, equipment, supplies and bulk transport equipment may cross wet portions of the stream channel, but only on an infrequent basis along established trails. NOTE: In-stream channel disturbance by dozing or trenching is strongly discouraged. The applicant must contact the Army Corps of Engineers (ACOE) and the county conservation districts to obtain appropriate permits before disturbing any stream channels;
- b. Number, size and depth of proposed test excavations. Disturbance of stream banks, shoreline vegetation and soils is prohibited. All operations must be confined to channel bottom gravels or areas well back from the stream bank. Excavations must be immediately backfilled and seeded upon completion;
- c. Procedures for clearing vegetation, stripping and stockpiling topsoil. All topsoil must be saved and protected for use in reclamation, even if the soil is very rocky. All topsoil stockpiles shall be identified with a sign. Topsoil must be salvaged before the land is disturbed by any other activity, including roads. A stripped buffer zone should be maintained between the pit and any topsoil stockpiles. Topsoil stockpile shall be located where they will not be disturbed or contaminated and they shall be seeded to provide erosion protection. Topsoil cannot be sold or removed from the site.
- d. Procedures for excavating and stockpiling overburden. No permanent stockpiles will be allowed. No materials (including overburden, topsoil or mineral products) shall be pushed over escarpments or steep slopes or into drainages, streams, or wetlands. All pits and associated disturbances must be backfilled and seeded by October 1 of the year of excavation.
- e. Procedures for fencing of excavations to prevent endangerment of humans, livestock and wildlife. All excavations shall be surrounded by fencing that prevents entry by humans, livestock, and wildlife (Noncoal Rules & Regulations Chapter 5 Sec. 2(f)). The fencing must be metal "woven wire" type material (or a reasonable substitute) and it must be secured to metal or wooden fence posts that are adequately secured into the ground.
- f. Description of mineral sampling procedures and any on-site processing. Mechanized equipment operations are only allowed in the dry portions of a stream channel. At no time is equipment allowed to operate in standing or flowing surface water (except for suction dredges). Washing of materials originating outside of the specific waterway is prohibited. These materials must be processed and discharged away from the waterway. The travel route between the waterway and the processing area must be stripped of topsoil prior to disturbance in accordance with item "c" above.;
- g. Procedures for water management. All "off-channel" (i.e., not within 50 feet of the active stream bank) discharge associated with the washing of native sands and gravels using clean water must be totally contained within approved sedimentation ponds specifically designed for this purpose. These sedimentation ponds must be constructed in upland areas at least fifty (50) feet from the active stream bank. These ponds will be constructed so that the bottoms of the ponds are at least four (4) feet above groundwater (i.e., local water table). These ponds must be sized and operated in such a manner that there are no surface discharges either directly or indirectly. Sedimentation ponds must be completely lined with plastic to minimize seepage in areas where an adequate separation from groundwater or stream channels cannot be reasonably achieved. Ponds greater than 0.5 acre require an SEO Permit;

- h. Description of fuel storage practices. On-site storage of fuels lubricants, solvents or other hazardous material is strongly discouraged; however, if on-site storage is necessary the applicant must provide an acceptable spill prevention and containment plan. At a minimum this plan shall confirm that the following will be done:
1. All such material will be stored in a plastic-lined, bermed area or a plastic stock tank, of sufficient capacity to contain the maximum possible spill (110% of the total material stored);
 2. An inventory of all stored materials will be submitted along with a narrative plan for how these materials will be handled, treated and disposed of;
 3. Sorbent material (i.e., diapers, bentonite granules, etc.) will be stored on the site to aid in the containment and clean-up of accidental spills;
 4. Notification, containment and clean up and of accidental releases or spills will be in accordance with WQD Rules and Regulations, Chapter IV, Section 4);
 5. Good housekeeping provisions that ensure the maintenance of the material area in a clear and orderly condition will be defined and followed.
 6. Under no circumstance is the storage of fuels, lubricants, solvents or other hazardous materials allowed within one hundred and fifty (150) feet of any surface water or the stream bank.
- i. Description of equipment storage and fueling areas. There can be no fueling or servicing of equipment within one hundred and fifty (150) feet of a stream banks. No mechanized equipment may be stored within one hundred and fifty (150) feet of a stream bank when the exploration site is not attended;
- j. Description of solid waste storage, handling, and disposal. All solid waste (trash) must be stored in containers equipped with a secure lid. The trash must be transported off the exploration area a minimum of once weekly. The trash must be properly disposed off-site at an approved landfill. A chemical toilet should be provided. The toilet should not be located within one hundred and fifty (150) feet of the active stream bank.
- k. Plans for drilling activities, including type of drilling, diameter and depth of holes, mud pits, hole plugging and capping procedures, etc. The performance standards applicable to exploration by drilling are contained in Chapter 8 of WDEQ-LQD Non-Coal Regulations;
- l. Procedures for temporary seeding of topsoil piles and disturbed areas that will not be reclaimed within 12 months;
- m. A tabulation of the acreage to be affected by the proposed exploration activities;
- n. Project time schedule. Mechanized equipment is allowed to operate only between June 15 through October 1 within the dry stream channel (i.e., no visible surface water). Seasonal restrictions due to wildlife may also be applicable;
- o. Typical cross sections illustrating the approximate dimensions of excavations, road cuts and fills, construction of side-hill drill sites;

Reclamation Plan to include the following:

- a. Overall, the LE application's reclamation plan must commit to backfilling all pits/excavations, replacing all topsoil, and seeding all reclamation with an approved seed mix;
- b. Procedures for backfilling, grading and contouring to restore approximate original contours of all affected lands, including roads: All excavations and sediment ponds must be backfilled (with materials originally derived from that excavation) to the approximate original contour. No material excavated from outside of any waterway may be placed or discharged into any waterway. Only materials excavated from the channel (gravel) may be placed back into the channel. All sedimentation ponds and exploration pits will be completely backfilled and recontoured to original topography and seeded. The cross-sectional area and configuration of the stream channel shall be restored the same as it was prior to the exploration activities. Any plastic lining material shall be removed from storage areas or sedimentation ponds and properly disposed off-site at an approved landfill.
- c. Procedures for spreading topsoil and preparing the seedbed: Topsoil shall be spread evenly over all graded surfaces. Topsoil shall be scarified, disked or harrowed on the contour to control erosion and prepare a proper seedbed prior to seeding.
- d. Procedures for seeding and revegetation, including seed mixes: Seeding shall be done at the earliest appropriate time; fall planting after September 15th and before the ground freezes; spring planting prior to April 15th when the ground is not frozen or covered with snow. The seed mix should consist of native, drought tolerant species. Lawn or pasture mixes, even "dryland pasture mix" are generally not suitable for Wyoming's arid climate. The operator should contact LQD for recommended seed mixes.
- e. Procedures to protect reclaimed areas from vehicular traffic and grazing;
- f. Procedures for monitoring and controlling weeds: Weeds shall be controlled in all areas to prevent on-site infestations as well as dispersal off-site. The operator should contact the county weed & pest department for assistance.

8. Reclamation Cost Estimate:

The applicant should prepare an itemized cost estimate listing all of the tasks required to complete the reclamation and the corresponding costs for each task. The types of equipment should be specified along with the hours required for each task. Mobilization costs should be included. Typically the LQD and federal agencies will add a 22% contingency. The LQD will determine the amount of bond required after the application has been reviewed and all agency comments addressed. The applicant should refer to the costs presented in WDEQ/LQD Guideline 12A to help calculate the bond estimate.

9. Sage Grouse Considerations:

All mineral exploration and/or mining projects must comply with the Governor's Executive Order (2011-5) entitled the "Greater Sage-Grouse Core Area Protection" (referred to herein as "the Order"). The Order can be found at the following website:

http://gf.state.wy.us/web2011/Departments/Wildlife/pdfs/SAGEGROUSE_EO_COREPROTECTION0000651.pdf

The first step necessary to comply with the Order is to determine whether the proposed project is within Greater Sage Grouse Core Habitat Area (or "Core Area"). This can be accomplished by using the Sage Grouse Core Area Map Viewer on the Wyoming Game and Fish Department (WGFD) website at <http://sunlight.wygisc.uwyo.edu/GovSageGrouse/#>. If the project does not lie within Sage Grouse Core

Area, the LE applicant should print a copy of the map created on the Map Viewer and submit the map with the LE application. This map should be accompanied by a brief explanation (text) indicating the proposed project boundary lies outside the Core Area.

NOTE: If the proposed project lies outside Core Area but is within 2 miles of an occupied lek, standard stipulations as outlined in Item 7 of the Governor's Executive Order No. 2011-5 will be applied to the operation.

If the proposed project lies within Core Area, the applicant should contact the Wyoming Game and Fish Department (WGFD) Habitat Protection Services at 307- 777-4506 prior to submitting the LE Application to obtain a Sage Grouse habitat protection determination. Additional information on Sage Grouse may be found on the WGFD Website at <http://gf.state.wy.us/web2011/wildlife-1000382.aspx>. The results of the WGFD's protection determination for the project should accompany the LE application. The LE applicant can expect WDEQ/LQD to require adherence to the recommendations made by the WGFD in their protection determination for the proposed project. Often the recommendations include seasonal and occupancy restrictions on the project. If the proposed exploration is located on federal surface, it is possible that the appropriate Federal Land Management agency may require additional restrictions on the project related to the Sage Grouse and/or other wildlife. Inquiries to those agencies are the responsibility of the applicant.

10. Annual Report and License Renewal:

Licenses to Explore are issued for a one year period and must either be reclaimed or a renewal application must be filed prior to the end of the annual period. Specifically, once yearly, prior to the anniversary date of the approval of the LE, an Annual Report and Renewal Request form must be filled out by the LE operator. The Annual Report and Renewal Request form will be mailed to the LE operator about one month before it is due. The form can also be downloaded here: <http://deq.state.wy.us/lqd/downloads/Forms/leann9-05.pdf>. If license renewal is not being sought, the operator still must submit Section 1 of the above-referenced form, in order to document the operations during the previous year.

11. License Termination and Release of Bond:

A request to terminate the License should be sent, in writing, to WDEQ/LQD, when the operator no longer wishes to renew the license. This can be easily communicated in the Annual Report. However, if reclamation is not yet complete, the operator must renew the License. Once the site is reclaimed, a minimum of two successful growing seasons must be documented before the site can be considered for termination and bond release. It is possible for the operator to request a bond reduction once the site has been reclaimed and seeded. This request must be made, in writing, to the LQD and the applicable land management agency.

Once the reclamation has undergone two successful growing seasons, the LE operator may request, in writing, a Final Inspection among LQD and the appropriate land management agency staff (BLM, USFS). The results of the Final Inspection will be reviewed for adherence to the commitments in the approved Reclamation Plan for the License to Explore. Once it is verified (via Inspection) that all of the reclamation requirements of the License have been met, the License will be terminated and the bond will be released. It is imperative that both LQD and the appropriate land management agency staff be present for the Final Inspection. The decision to terminate a License and release the bond must be unanimous from all involved agencies.

ATTACHMENT A: Other Agency Contacts

<p align="center">BUREAU OF LAND MANAGEMENT OFFICES</p>	<p align="center">U.S. FOREST SERVICE OFFICES</p>
<p>Wyoming State Office 5353 Yellowstone Rd PO Box 1828 Cheyenne WY 82009-4137 (307 775-6256</p> <p>Casper District Office 2987 Prospector Drive Casper WY 82604 (307) 261-7600</p> <p>Buffalo Field Office 1425 Fort Street Buffalo WY 82834-2346 (307) 684-1100</p> <p>Newcastle Field Office 1101 Washington Blvd Newcastle WY 82701-2972 (307) 746-6600</p> <p>Worland Field Office 101 South 23rd PO Box 119 Worland WY 82401-0119 (307) 347-5100</p> <p>Lander Field Office 1335 Main PO Box 589 Lander WY 82520-0589 (307) 332-8400</p>	<p>Rock Springs Field Office 280 Highway 191 N. Rock Springs WY 82901-3448 (307) 352-0256</p> <p>Cody Field Office 1002 Blackburn PO Box 518 Cody WY 82414-0518 (307) 578-5900</p> <p>Kemmerer Field Office 312 Highway 189 North Kemmerer WY 83101-9710 (307) 828-4500</p> <p>Pinedale Field Office 1625 W. Pine St. PO Box 768 Pinedale WY 82941-0768 (307) 367-5300</p> <p>Rawlins Field Office 1300 N. Third St PO Box 2407 Rawlins WY 82301-2407 (307) 328-4200</p>
<p>WDEQ Water Quality Division: (307) 777-7781 US Army Corp of Engineers: Suite 210, 2232 Del Range Blvd., Cheyenne, WY 82009 (307) 772-2300 State Engineers Office: (307) 777-6150</p>	<p align="center">WY GAME AND FISH</p> <p>5400 Bishop Blvd. Cheyenne WY 82006 (307) 777-4587</p>
<p>WY STATE GEOLOGICAL SURVEY PUBLICATIONS PO Box 1347Laramie WY 82073 (307) 766-2286 http://www.wsgs.uwyo.edu</p>	<p>WY OFFICE OF STATE LANDS & INVESTMENTS 3rd Floor West - Herschler Bldg. 122 West 25th Street Cheyenne WY 82002 (307) 777-7331 http://slf-web.state.wy.us/</p>

ATTACHMENT B

WYOMING CLASS 1 WATERS (DEFINED)

1. All surface waters located within the boundaries of national parks and congressionally designated wilderness areas;
2. The main stem of the Snake River through its entire length above the U.S. Highway 22 Bridge (Wilson Bridge);
3. The main stem of the Green River, including the Green River Lakes from the mouth of the New Fork River upstream to the wilderness boundary;
4. The Main Stem of the Wind River from the boundary of the Wind River Indian Reservation upstream to Boysen Dam;
5. The main stem of the North Platte River from the mouth of Sage Creek (approximately 15 stream miles below Saratoga, Wyoming) upstream to the Colorado state line;
6. The main stem of the North Platte River from the headwaters of Pathfinder Reservoir upstream of Kortess Dam;
7. The main stem of the North Platte River from the Natrona County Road 309 bridge (Goose Egg bridge) upstream to Alcova Reservoir;
8. The main stem of Sand Creek from the U.S. Highway 14 bridge upstream;
9. The main stem of the Middle Fork of the Powder River through its entire length above the mouth of Buffalo Creek;
10. The main stem of the Tongue River, the main stem of the North Fork of the Tongue River and the main stem of the South Fork of the Tongue River above U.S. Forest Service boundary;
11. The main stem of the Sweetwater River above the mouth of Alkali Creek;
12. The main stem of the Encampment River from the U.S. Forest Service boundary upstream to the Colorado state line;
13. The main stem of the Clarks Fork River from the U.S. Forest Service boundary upstream to the Montana state line;
14. All waters within the Fish Creek (near Wilson, Wyoming) drainage;
15. The main stem of Granite Creek (tributary of the Hoback River) through its entire length;
16. Fremont Lake; and
17. Wetlands adjacent to Class 1 waters are also treated as Class 1.