

ANCHORAGE WETLANDS ASSESSMENT METHOD

Data Sheets

Date of Field Work _____ Investigators: _____

A. WETLAND NAME AND/OR NUMBER: _____

B. MAP # _____

C. DESIGNATION IN AWMP _____

(If not designated in the AWMP, check here _____)

D. MUNICIPALITY SUB-REGION, GEOZONE _____

E. LEGAL DESCRIPTION

Section _____ Township _____ Range _____ Quarter _____

Subdivision _____ Lot _____ Block _____

F. GENERAL LOCATION AND DESCRIPTION OF WETLAND BOUNDARY

G. MAP AND AIR PHOTO REFERENCES

1. USGS 1:63,360 Map # _____

2. National Wetlands Inventory Map # _____

3. Aerial Photos:

a. Date most recent photo taken _____

b. Scale _____

c. Flight Line # _____

H. WETLAND SIZE

Total Wetland Size: _____ Acres

SECTION 1. HYDROLOGICAL COMPONENT

FLOW STABILIZATION

1.1 TYPE OF STORMWATER THAT WETLANDS DETAINS (Check one)

- (10) _____ Man-induced and natural (ambient) storm flows
- (5) _____ Man-induced stormwater flows only
- (2) _____ Natural (ambient) stormwater flow
- (1) _____ Minimal stormwater detention

1.2 POSITION OF WETLANDS WITHIN WATERSHED (State Park or National Forest boundary as upper limit)

- (10) _____ In upper third of watershed
- (5) _____ In middle third of watershed
- (2) _____ In lower third of watershed

1.3 LAND USE ALONG WATERWAY OR WETLANDS FOR .5 MILES BELOW WETLAND (Check one)

- (10) _____ Developed residential/commercial/industrial area located within .5 miles of outflow
- (5) _____ Lands below outflow are undeveloped and/or outflow enters lake, stream or wetland
- (2) _____ Developed residential/commercial/industrial area located >.5 miles downstream of outflow

SIZE

1.4 SIZE EVALUATION

| Wetland Size (Acres) | Total Points | Wetland Size (Acres) | Total Points |
|----------------------|--------------|----------------------|--------------|
| < 1 | 1 | 44 - 53 | 10 |
| 1 - 4 | 2 | 54 - 64 | 12 |
| 5 - 8 | 3 | 65 - 77 | 14 |
| 9 - 12 | 4 | 78 - 92 | 16 |
| 13 - 17 | 5 | 93 - 110 | 18 |
| 18 - 22 | 6 | 111 - 128 | 20 |
| 23 - 28 | 7 | 129 - 160 | 22 |
| 29 - 35 | 8 | 161 - 200 | 24 |
| 36 - 43 | 9 | > 200 | 25 |

Points: _____ (maximum = 25 points)

FLOW RETENTION/FLOOD CONTROL

1.5 SIZE OF CATCHMENT BASIN _____ acres

Wetlands area as a % of catchment basin size _____%

Catchment Basin Evaluation Points Table

| Basin Size (acres) | Wetland Area as % of Basin Size | | | | | | | | |
|--------------------|---------------------------------|------|-------|-------|-------|-------|-------|-------|--------|
| | <3 | 3-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80+ |
| <1 | 1 | 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| 1 - 3 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 4 - 9 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 10 - 27 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |
| 28 - 81 | 9 | 11 | 13 | 15 | 18 | 21 | 23 | 25 | 25 |
| 82 - 243 | 12 | 15 | 18 | 21 | 24 | 25 | 25 | 25 | 25 |
| 244 - 729 | 15 | 19 | 23 | 25 | 25 | 25 | 25 | 25 | 25 |
| 730 - 2,100 | 18 | 22 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 2,101 - 6,500+ | 22 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

Points for Flow Augmentation: _____ (maximum = 25 points)

1.6 SUBJECT WETLANDS AS A PERCENTAGE OF TOTAL WETLANDS ACREAGE IN CATCHMENT BASIN

- (2) _____ 0-20%
(5) _____ 21-40%
(10) _____ 41-60%
(15) _____ 61-80%
(20) _____ 81-100%

WATER QUALITY

1.7 SITE TYPE (Check dominant site)

- (1) _____ Palustrine (isolated)
(5) _____ Palustrine (with permanent or ephemeral flow)
(7) _____ Riverine
(10) _____ Riverine (at river mouth)
(8) _____ Lacustrine (exposed to lake)

1.8 SENSITIVE AREAS BELOW SUBJECT WETLANDS (Identify types of areas/uses downstream of outlet or downgradient of groundwater outflow that are positively influenced by subject wetlands.)

Check all that apply.

- _____ Fish spawning and rearing habitat
_____ Sport fishing area
_____ Potable water sources
_____ Contact water recreation area
_____ Waterbird nesting habitat (high numbers and diversity of nesting species)

2 points each (maximum = 10 points)

1.9 ACTUAL WETLANDS AREA DOMINATED BY ROBUST EMERGENTS AND SUBMERGENTS (Check one)

- (1) _____ < 5% coverage
(2) _____ 5-10% coverage
(3) _____ 10-20% coverage
(6) _____ 20-40% coverage
(10) _____ 40-60% coverage
(15) _____ >60% coverage

1.10 GENERALIZED LAND USE IN CATCHMENT BASIN (Check one)

- (1) _____ Mainly parks and open space
- (3) _____ Mixture of parks/open space and residential
- (5) _____ Mainly residential
- (7) _____ Mixture of residential and commercial
- (9) _____ Mainly commercial
- (11) _____ Mixture of commercial and industrial
- (15) _____ Mainly industrial

1.11 LONG-TERM NUTRIENT TRAP (Check one)

- (10) _____ Wetland with organic soils on 50%+ of area
- (5) _____ Wetland with organic soils on < 50% of area, mineral soils or very shallow peat

1.12 WATER QUALITY MAINTENANCE (Check one)

- (20) _____ Inflow to wetlands is of poor quality (e.g., storm drains, snow disposal, industrial runoff) and detention time is several days and storage capacity is high. Wetlands is obvious filter and/or is a nutrient sink
- (12) _____ Inflow is from stream flows or from storm event overflow and detention time is moderate. Area has moderate storage capacity and moderate nutrient uptake
- (8) _____ Inflow is from stream flows or storm events but is from relatively undisturbed or undeveloped areas and detention time and storage capacity are moderate
- (2) _____ Essentially no inflow and/or very short detention time and low storage capacity

EROSION CONTROL

1.13 EROSION BUFFER (Lacustrine/Riverine only)

Riverine Wetlands (shoreland and floodplain) (check principal vegetation form)

- (10) _____ Trees or shrubs
- (5) _____ Emergents, submergents
- (1) _____ Sparsely vegetated

Lacustrine Wetlands (including floodplain)

- (10) _____ Trees or shrubs
- (8) _____ Emergents
- (4) _____ Submergents or floating
- (1) _____ Sparsely vegetated

TOTAL FOR HYDROLOGIC COMPONENT: _____
(Maximum = 200 points)

SECTION 2. HABITAT COMPONENT

HABITAT STRUCTURE AND FUNCTION

- 2.1 VEGETATION COMMUNITY STRUCTURE (see Figs., this Appendix.) Identify forms for each community type in subject wetland. Particular form must cover at least 5 percent of site. (Maximum points = 25)

Example: Subject wetlands has 4 communities. Within each community, identify each (and all) form(s) and fill in appropriate lines below:

- A. One Form (1 point per community)

Community # List Form

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

- B. Two Forms (2 points per community)

Community # List Forms

| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

- C. Three Forms (3 points per community)

Community # List Forms

| | | | |
|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

- D. Four Forms (4 points per community)

Community # List Forms

| | | | | |
|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

E. Five Forms (5 points per community)

Community # List Forms

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

F. Six or More Forms (6 points per community)

Community # List Forms

| | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ |

SPATIAL ATTRIBUTES

2.2 NUMBER OF WETLANDS PLANT COMMUNITIES (From Hogan and Tande, 1983, see Plant Communities list, this Appendix.) (Count only numbered plant communities.)

(5) _____ > 7 List Communities:
(4) _____ 5 - 7
(3) _____ 2 - 4
(1) _____ 1

2.3 INTRASPERSION/EDGE EFFECT OF COMMUNITY TYPES (See Figures, this Appendix.) (Find pattern which most closely resembles subject wetlands)

(1) _____ Type 1
(2) _____ Type 2
(3) _____ Type 3
(4) _____ Type 4

2.4 DIVERSITY OF SURROUNDING HABITAT (Check all that apply) (Within .25 mile of wetlands edge = Migratory Corridors) (maximum = 12 points)

(1) _____ Pasture, open fields, nursery or sod farm
(2) _____ Mixed deciduous/coniferous forest
(1) _____ Urban residential development
(3) _____ Open lake
(2) _____ Undulating, undeveloped terrain and/or wooded ravines
(3) _____ Creeks, drainageways or ephemeral streams

2.5 PROXIMITY TO OTHER WETLANDS HABITATS

- (10) _____ Hydrologically connected by surface flow to other wetlands (different type) within .25 mile
- (8) _____ Hydrologically connected by surface flow to other wetlands (different type) from .25 to .5 miles away
- (6) _____ Hydrologically connected by surface flow to other wetlands (same type) or open water within .25 mile
- (5) _____ Hydrologically connected by surface flow to other wetlands (same type) or open water from .25 to .5 mile away
- (4) _____ Within .5 mile of other wetlands (different type) or open water, but not hydrologically connected by surface flow
- (2) _____ Within .5 mile of other wetlands (same type) but not hydrologically connected by surface flow
- (0) _____ No wetland within .5 mile

2.6 OPEN WATER TYPES (See Figures; this Appendix.) (Find pattern which most closely resembles subject wetlands.)

- (0) _____ No open water
- (4) _____ Type 1
- (5) _____ Type 2
- (7) _____ Type 3
- (9) _____ Type 4
- (12) _____ Type 5
- (4) _____ Type 6
- (7) _____ Type 7
- (3) _____ Type 8

WETLAND PRODUCTIVITY

2.7 HARDINESS ZONE (See Appendix B.) (Extrapolate for outlying areas.)

- (5) _____ Zone 5-6
- (3) _____ Zone 4
- (2) _____ Type 3
- (1) _____ Type 2

2.8 SOILS TYPE (In upper 3 feet, from SCS, or other soils survey)_____

| % of Area | | | |
|-----------|-------|-----|-------|
| Mineral | _____ | X 5 | _____ |
| Organic | _____ | X 2 | _____ |
| Clays | _____ | X 1 | _____ |

2.9 TYPE OF WETLAND (smallest unit = 4,000 sq ft)

| <u>Approximate Area (acres)</u> | | <u>% of Total</u> | |
|---------------------------------|---------------------------|-------------------|-------------|
| _____ | Palustrine (isolated) | _____ | X 2 = _____ |
| _____ | Palustrine (with outflow) | _____ | X 3 = _____ |
| _____ | Riverine | _____ | X 4 = _____ |
| _____ | Riverine (at mouth) | _____ | X 5 = _____ |
| _____ | Lacustrine (next to lake) | _____ | X 4 = _____ |
| _____ | Lacustrine (open water) | _____ | X 2 = _____ |
| Total Points = _____ | | | |

2.10 NUTRIENT STATUS OF SURFACE WATER

- A. Write conductivity reading and calculate Total Dissolved Solids (TDS) @ 25°C per tables in Appendix C. Readings to be taken at all outflows of subject wetlands.

| <u>Location Sampled</u> | <u>Initial Specific Conductants</u> | <u>Temperature</u> | <u>TDS mg/l</u> |
|-------------------------|-------------------------------------|--------------------|-----------------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| Average TDS: | | | _____ |

- B. Check category from A

Average TDS, mg/l

| | | |
|-----|-------|-------------|
| (2) | _____ | < 100 |
| (6) | _____ | 100 - 300 |
| (3) | _____ | 301 - 500 |
| (2) | _____ | > 500Type 2 |

WATER REGIME

2.11 SURFACE WATER PERSISTENCE (% probability of surface water present during the period April to July)

- (2) _____ 0 to 50% of April-July
- (6) _____ 50 to <100% of April-July
- (10) _____ 100% of April-July

2.12 WATER BODY SIZE (Estimate size of smallest open water body during period April-July)

- (2) _____ 400 sq ft or less
- (5) _____ 400 sq ft to .5 acre
- (10) _____ .5 acre to 4 acres
- (15) _____ > 4 acres

2.13 WETLAND CONTIGUITY WITH STREAM OR LAKE

- (0) _____ Wetland isolated from stream/lake
- (3) _____ Wetland drains/is connected to stream/lake
- (5) _____ Stream or lake lies within wetland

2.14 WETLAND SIZE

*Add points from 2.1 to 2.13

Size (Habitat Component) Evaluation Table

| Acres | Sum of Habitat Component Points* | | | | | | |
|-----------|----------------------------------|---------|---------|---------|---------|---------|------|
| | < 15 | 15 - 30 | 31 - 45 | 46 - 60 | 61 - 75 | 76 - 90 | > 90 |
| < 2 | 4 | 6 | 7 | 8 | 9 | 10 | 11 |
| 2 - 4 | 4 | 6 | 8 | 9 | 10 | 11 | 14 |
| 5 - 8 | 5 | 7 | 9 | 11 | 13 | 15 | 18 |
| 9 - 12 | 5 | 8 | 10 | 12 | 14 | 17 | 20 |
| 13 - 17 | 6 | 9 | 11 | 14 | 16 | 19 | 24 |
| 18 - 23 | 6 | 11 | 14 | 16 | 18 | 22 | 29 |
| 24 - 28 | 7 | 11 | 14 | 18 | 20 | 27 | 35 |
| 29 - 37 | 7 | 12 | 16 | 21 | 25 | 32 | 39 |
| 38 - 49 | 7 | 13 | 18 | 23 | 27 | 34 | 44 |
| 50 - 62 | 8 | 15 | 20 | 26 | 31 | 38 | 48 |
| 63 - 81 | 8 | 17 | 23 | 32 | 36 | 43 | 53 |
| 82 - 105 | 9 | 18 | 26 | 34 | 38 | 47 | 57 |
| 106 - 137 | 9 | 19 | 29 | 36 | 42 | 52 | 62 |
| 138 - 178 | 10 | 20 | 32 | 39 | 45 | 57 | 67 |
| 179 - 233 | 10 | 22 | 36 | 43 | 48 | 62 | 72 |
| 234 - 302 | 10 | 24 | 39 | 48 | 52 | 68 | 78 |
| 303 - 400 | 11 | 26 | 43 | 53 | 56 | 73 | 80 |
| > 400 | 11 | 30 | 46 | 58 | 63 | 78 | 80 |

Total Points: _____ (maximum = 80)

TOTAL FOR HABITAT POTENTIAL COMPONENT: _____
(Maximum = 200 points)

SECTION 3. SPECIES OCCURRENCE COMPONENT

Note: Answers to all sections marked with an * should be listed on the final page score sheet.

RARITY AND/OR SCARCITY

- 3.1* HABITAT FOR PLANT SPECIES OF STATEWIDE SIGNIFICANCE (See this Appendix.) (Species listed as threatened/endangered in Alaska; or known from a very few sites statewide)

Name of Species: _____ (1 species = 10 points)
_____ (2 species = 15 points)
_____ (3+ species = 25 points)
_____ (0 species = 0 points)

- 3.2* BREEDING, FEEDING, SPAWNING, OR REARING HABITAT FOR BIRD OR ANADROMOUS FISH SPECIES SIGNIFICANT TO THE MUNICIPALITY OF ANCHORAGE (Existing or historic within past 5 years) (See this Appendix.)

Name of Species: _____ (1 species = 5 points)
_____ (2 species = 8 points)
_____ (3+ species = 15 points)
_____ (0 species = 0 points)

- 3.3* HABITAT FOR PLANT SPECIES RARE OR UNIQUE IN THE MUNICIPALITY OF ANCHORAGE (See this Appendix)

Name of Species: _____ (1 species = 4 points)
_____ (2 species = 7 points)
_____ (3 species = 12 points)

- 3.4 SCARCITY VALUE (Subject wetlands type as % of total type in catchment basin; calculate % for all types in subject area.)

| Wetland Type in Acres (A) | Total Acreage of Type in Basin (B) | A/B as % | A/B (%) X 10 |
|------------------------------|---------------------------------------|----------|--------------|
| | | | |
| | | | |
| | | | |
| | | | |

Total Points: _____ (maximum = 16 points)

SIGNIFICANT FEATURES

- 1.5 NESTING OF COLONIAL WATERBIRDS (Red-necked Grebe, Canada Goose, Glaucous-Winged/Herring Gull, Mew Gull, Bonaparte's Gull)

- (12)* _____ Currently nesting; name species
 (9) _____ Known to have nested in past 5 years; name species
 (6) _____ Active feeding area in nesting season
 (3) _____ Staging area for colonial waterbirds
 (0) _____ None known

- 3.6 WATERFOWL STAGING (Check highest level)

- (15)* _____ High importance within Municipality; supports high numbers of several species
 (10) _____ Moderate importance
 (5) _____ Very local importance
 (0) _____ Not used for staging

3.7 WATERBIRD PRODUCTION (Check highest level)

- (15)* _____ High importance; produces several broods of several species
(10) _____ Moderate importance
(5) _____ Minimal or no significance

3.8 BREEDING BIRD DIVERSITY

- (25)* _____ Nesting occurs for >8 obligate wetlands species, and/or (circle one) >15 total species
(15) _____ Nesting occurs for 4 to 8 obligate wetlands species, and/or (circle one) 8-15 total species
(5) _____ Nesting occurs for <4 obligate wetlands species, and/or (circle 1) <8 total species

3.9 MIGRATORY BIRD STAGING AREA (Non-waterfowl species)

- (15)* _____ High significance (annual use by >25 species)
(5) _____ Moderate significance (can occasionally be significant; annual use by 10-25 species)
(1) _____ No significance (annual use by <10 species)

3.10 SIGNIFICANCE FOR FISH SPAWNING (Number of species that spawn in immediately adjacent waterbody)

- (25)* _____ 5+ species
(15) _____ 2-4 species
(5) _____ 1 species
(0) _____ No species

3.11 SIGNIFICANCE FOR FISH REARING (Number of fish species that use wetlands or immediately adjacent waterbody for rearing)

- (25)* _____ 5+ species
(15) _____ 2-4 species
(5) _____ 1 species
(0) _____ No species

TOTAL FOR SPECIES OCCURRENCE COMPONENT:_____
(Maximum = 200 points)

SECTION 4. SOCIAL FUNCTION COMPONENT

EXISTING RECREATIONAL ACTIVITIES

4.1 TYPE OF WETLAND-ASSOCIATED USE

| Use Intensity (see definitions below) | Hunting | Passive Recreation | Fishing | Boating | Other |
|---------------------------------------|---------|--------------------|---------|---------|-------|
| High (10 points) | | | | | |
| Moderate (5 points) | | | | | |
| Low (2 points) | | | | | |
| None Known/Not Possible (0 points) | | | | | |

Use Intensities: High Used in several seasons by numerous individuals and/or groups
 Moderate Used in one to two seasons by a few individuals (from local area) and/or by a single group
 Low Used irregularly by a very few individuals

Points: _____ (maximum = 50 points)

1.2 EDUCATIONAL USE (Known or potential)

- (15) _____ Frequent: Used 5+ times per year by schools, clubs or tour groups
(8) _____ Occasional: Used 2-5 times per year
(4) _____ Infrequent: Used by organized groups once/year
(2) _____ No known educational use but in close proximity to schools
(0) _____ No known or potential use

List groups utilizing the wetlands: _____

4.3 FACILITIES AND PROGRAMS

- (5) _____ Area has interpretive trail or other educational function
(0) _____ No facilities or programs

WETLANDS RECREATION POTENTIAL

4.4 LANDSCAPE DISTINCTNESS (Identify subject wetland's relative position and value to viewshed from all perspectives.)

- (15) _____ Clearly distinct in urban area
(8) _____ Distinct in rural area
(0) _____ Indistinct

4.5 TYPES OF DISTURBANCE (Check all that apply and total.)

- _____ Roads/trails
_____ Buried utility corridor
_____ Surface utility corridor
_____ Channelization
_____ Drainage
_____ Filling
_____ Water pollution
_____ Clearing/grubbing
_____ ORV use

Add and subtract from total points (either 0 or a minus number)

4.6 DEGREE OF DISTURBANCE/AESTHETIC VALUES

- (15) _____ Human disturbance absent or nearly so
(10) _____ One or several single, or local disturbances
(6) _____ Moderate disturbance or local water pollution
(2) _____ Impaired natural quality is intense in some areas or severe local water pollution
(0) _____ Extremely intense disturbance or widespread, severe water pollution

4.7 PUBLIC USE/OPEN SPACE VALUE (Deficiency is based on Municipal park plans)

- (15) _____ Wetland is within 1 mile of area known to be relatively deficient in parkland/open space or provides direct access to adjacent public lands
(8) _____ Wetland is within 1 to 2.5 miles of an area known to be deficient in parkland or could (but does not) provide access to adjacent public lands
(0) _____ Wetland is >2.5 miles away from area known to be deficient in parkland and does not provide access to public lands

1.8 LAND IDENTIFICATION AS PARKLAND (Specific to Municipality of Anchorage)

- (10) _____ Wetlands identified as dedicated parkland in Municipal document
 (5) _____ Wetlands identified as potential future park, open space or trail in Parks/Trails plan
 (2) _____ Wetlands is identified Municipal selection from State or is in Heritage Land Bank and of little commercial value
 (0) _____ Not applicable

4.9 RESEARCH AND STUDIES

- (5) _____ One or more wetland-related paper published
 (2) _____ One or more reports written about some aspect of the wetlands
 (0) _____ No reports or papers

List reports or papers _____

4.10 OWNERSHIP/ACCESSIBILITY (Estimate % of area, enter in the space, and multiply by points values (in brackets). Round off figures to nearest whole number and total points.)

| | Ownership | | | | |
|---|-------------------------|-----------------------|---------------------------|-----------------------------|--------------------|
| | Public/ Unrestricted | Public/ Restricted | Private/Open to Public | Private/Closed to Public | Private/ Posted |
| Easy by Road, Water or Trail | _____ (20) | _____ (15) | _____ (8) | _____ (3) | _____ (2) |
| Easy Only at Certain Times | _____ (15) | _____ (8) | _____ (4) | _____ (3) | _____ (2) |
| Limited, With Some Effort | _____ (8) | _____ (7) | _____ (4) | _____ (3) | _____ (2) |
| Difficult | _____ (7) | _____ (6) | _____ (3) | _____ (2) | _____ (0) |

Total Points: _____

TOTAL FOR SOCIAL FUNCTION COMPONENT: _____
 (Maximum = 150 points)

POINTS TOTALS:

SECTION 1. HYDROLOGIC COMPONENT

SECTION 2. HABITAT COMPONENT

SECTION 3. SPECIES OCCURRENCE COMPONENT

SECTION 4. SOCIAL FUNCTION COMPONENT

List all significant features marked with an * in Sections 3.1 - 3.11

MANAGEMENT RECOMMENDATIONS:

MISCELLANEOUS COMMENTS/EXISTING CONDITIONS:

SKETCH MAP OF AREA AND IMPORTANT FEATURES (on back of sheet, if appropriate):