## PURPOSE

The Municipality of Anchorage (MOA) Wetlands Atlas depicts known wetland features within the corporate boundaries of the MOA. These maps provide public and private users with a planning-level tool useful in guiding management and development decisions for local wetlands. The Atlas is compiled in three volumes showing wetland features in the Anchorage Bowl (Volume 1), and along the Knik and Turnagain Arms of Cook Inlet (Volumes 2 and 3).

As they are throughout the nation, wetlands within the MOA are managed to support a range of services valuable to the community as a whole. To manage and maintain these services, wetlands are regulated under local, state, and federal laws. Within the MOA, wetlands are administered under the U.S. Army Corps of Engineers (under Section 404 of the Clean Water Act), the State of Alaska (under Title 85 Chapter 40 of the Alaska Administrative Code (AAC) and the Alaska Coastal Management Program), and the MOA (through its general permitting authority as specified in the 1996 Anchorage Wetlands Management Plan). The Atlas presents wetland information in both this regulatory context and in context with other Anchorage geographic features.

The Atlas depicts and labels wetland features identified in the 1996 Anchorage Wetlands Management Plan using feature identities and designations catalogued in the original Plan documents. Although features mapped in the Atlas are generally located as they were in the 1996 Plan, the Atlas does incorporate boundary adjustments and corrections to these wetland features where significant boundary changes have occurred since mapping was completed for the 1996 Plan.

Users are advised that Atlas mapping is not intended to be used or interpreted as a precise or complete representation of wetland conditions as they actually exist on the ground. Atlas mapping of wetlands is incomplete, locations and spatial relationships of wetlands and other geographic features are approximate, and map information reflects only that data available for use in map compilation at the time of publication of the current edition of the Atlas. Though the Atlas is expected to be useful in preliminary assessment of local wetland characteristics, it is not intended to supplant the need for project managers to confirm and map actual site conditions.

## MAP DEFINITIONS

MOA Wetlands Atlas map pages show a range of wetland feature types, classified by their regulatory purview. Map pages also show select hydrographic and geographic features to help users place wetlands in context with the functional service these wetlands provide local Anchorage communities. As a guide to the use of this atlas, general definitions of these features are provided below. Though the definitions provided in this document are synoptic, the MOA does apply rigorous criteria and standards to its hydrographic mapping and maintains metadata for the geospatial data generated in its mapping programs. Users wishing access to more precise definitions, criteria, and standards used by the MOA in mapping these features should consult the technical documents referenced at the end of the Atlas, or contact the appropriate Municipal agencies.

### Wetland Identity

A primary function of the MOA Wetland Atlas is identification and depiction of known freshwater wetlands administered by the MOA under the 1996 Anchorage Wetlands Management Plan. To assist in this, these features have been labeled with the official identity code assigned under the Plan.

> ***96 AWMP ID***–Specifies the "Site" identification code officially assigned each wetland considered under the 1996 Anchorage Wetlands Management Plan. Note that under the Plan many individual wetland polygon features were assigned the same "Site" identification code.

### Wetland Type

Wetlands can be grouped by similar geomorphologic, hydrologic, chemical, and biological factors. The MOA's general permitting authority under the 1996 Plan is in part based on the distinction between intertidal and freshwater wetlands:

> ***Freshwater Wetlands***–Include inland freshwater wetland features that are predominantly palustrine or riverine in character. Within the Municipal corporate boundaries, the MOA administers permitting of activities within these wetlands. All Atlas wetland features designated A, B, or C have been identified in the 1996 Plan as freshwater wetlands.

The U.S. Army Corps of Engineers manages and administers the permitting of activities within intertidal wetland features, therefore, they are not shown in this Wetlands Atlas. Intertidal wetlands generally include coastal saline or brackish wetland features that are predominantly estuarine in character.

### Wetland Designation

Wetlands designations (referred to as "class" under an earlier wetland management plan) identify the resource functional evaluation ranking of freshwater wetlands and open water features administered by the MOA. Designation classes were established and assigned under the 1996 Anchorage Wetlands Management Plan based on the observed range of total functional performance of wetlands in Anchorage and assessed according to hydrologic, habitat, species, and socioeconomic performance categories. In order, from the highest functional evaluation to the lowest, wetlands are designated as A, B, or C wetlands. Freshwater wetlands that were not assigned designations under the 1996 Plan and freshwater wetland features mapped since implementation of the Plan are identified on Atlas map pages as "Not Designated".

> ***A Wetlands***–Have been identified as having a high valuation for all functional categories. These wetlands have high priority for protection and preservation due to their ability to provide the highest ecologic, biologic, and hydrologic function.
>
> ***B Wetlands***–Have been identified as having a moderate overall functional valuation, but still providing significant support to key watershed and drainage area functions. B wetlands usually contain a mixture of wetland features reflecting both higher and lower functional performance.
>
> ***C Wetlands***–Have been identified as having a low overall functional valuation. These features may have moderate values for one or more functions, but generally have reduced or minimal overall functional or ecological value.

### Other Hydrographic Features

Because wetlands respond to and interact with their surrounding environment, it is necessary to address management of these features in a larger geographic context than just the extent of each individual wetland. To support this use, the Atlas depicts other important hydrographic features on the wetlands maps including storm drainage, streams, and lakes.

> ***Drainageways***–Include all surface water conveyances that transmit surface runoff from single storm events, or flows from local snow melt, or flows from man-made drainage devices that intercept ground water. On Atlas map pages "Natural Drainageways" are natural features, such as swales or rills, that serve to collect and direct ephemeral surface water flows. A constructed drainageway is a man-made channel or conduit designed to convey storm or other

drainage waters. On the Atlas map pages constructed drainageways have been further classified as "Stormdrain Pipes" (any manmade closed conduit) and "Stormdrain Channels" (any manmade open conveyance ). Users should be particularly aware that Municipal mapping of both natural and constructed drainageway features is incomplete.

***Streams***–Include watercourses that perennially or intermittently convey waters not solely the result of drainage construction or storm water runoff. Streams differ primarily from drainageways in that they typically transmit surface and groundwater flows over some prolonged period of time. A stream maintains its identity as a watercourse even though it may periodically break up and disappear along its alignment. On Atlas map pages, streams have been labeled with their geographic names where these are known.

***Lakes***–Are perennial or ephemeral inland bodies of open, standing water, which are not actively maintained for, or constrained to, a single specific human use (e.g., wastewater treatment ponds or flood detention ponds). Thus, an inland waterbody may serve some single, important human function (e.g., water supply) but to the extent that it is maintained to serve other functions as well (e.g., provision of fish and wildlife habitat and recreation opportunities) it is identified as a lake feature. Note that lake features may include expanded parts of rivers, reservoirs behind permanent dams, and basins seasonally inundated by intermittent stream flows. In any event, a lake is ultimately characterized by open water. Thus, standing water that exists solely amongst vegetation (e.g., as in a swamp, marsh, or mire) does not comprise a lake.

### Other Geographic Features

Inclusion of other basic geographic features on map pages eases use of the MOA Wetlands Atlas and provides important context for wetlands management.

***Township Section***–Boundary information provides the basic geographic framework for each Atlas map page. Each map page displays wetland features for a single township section. The title box at the lower right hand corner of each map page identifies the township, range, and section information for the map view on that page. To ease comparison with earlier publications, the title box also includes the map page number as originally published on the 1996 Plan map sheets.

***Parcels***–Depicts platted, surveyed, and deeded parcel lines, and rights-of-way lines available in the Municipal digital geospatial databases at the time of map publication. Some of these features are labeled with lot and block IDs on the Atlas maps to help in users' navigation to targeted parcels.

***Subdivisions***–Depicts platted subdivision boundaries and division lines between subdivision additions. Only primary subdivisions are labeled on Atlas map pages.

# MAPPING RESOURCES

The 2003 Wetlands Atlas was compiled using a number of core geospatial datasets maintained by the MOA. These data are continually being revised and updated by the Municipal agencies responsible for maintenance of the individual datasets. All users are cautioned to seek the latest data and confirm site-specific conditions in the field before application of Atlas information to important decisions. Users who are interested in the digital information used to compile this atlas may request datasets through the MOA Information Technology Department (ITD), or may contact individual agencies for specific information about mapping standards and practices.

## Data Sources

Core Municipal datasets used in compilation of this Atlas include:

| Data Content | File Name | Data Source |
|---|---|---|
| Wetlands | e03MWetlnds | Planning, Technical Services |
| Streams | e03MStreams | Planning, Technical Services |
| Streams | e01LStreams | Planning, Technical Services |
| Lakes | b0421MLakes | Planning, Technical Services |
| Parcels | PARCELS | Planning, Technical Services |
| Subdivisions | SUBD | Planning, Technical Services |
| Storm Drainage | PIPES | Planning, Technical Services |
| Storm Drainage | b0623MDrngwys | Public Works, WMS |
| Base Imagery | IKONOS_2001_8x | ITD |

## References

Municipality of Anchorage, 1982, Anchorage Wetlands Management Plan, Background Information, Volume II. Department of Community Planning and Development.

Municipality of Anchorage, 1994, Anchorage Wetlands Management Plan, Background Information, Volume II. Department of Community Planning and Development. 31 Pp.

Municipality of Anchorage, 1996, Anchorage Wetlands Management Plan, 10-year Revision. Department of Community Planning and Development. 220 Pp.

Municipality of Anchorage, 2002, Municipal Hydrologic Features Classification, Document No.WMP APr97002, WMS Project number 97001.

Municipality of Anchorage, 2003, MOA_WTLNDS: Logical Data Structure (Draft).

## Mapping Team

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