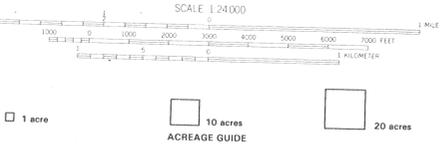


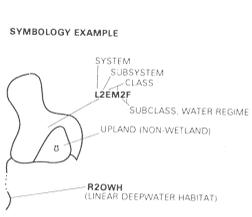
NATIONAL WETLANDS INVENTORY UNITED STATES DEPARTMENT OF THE INTERIOR



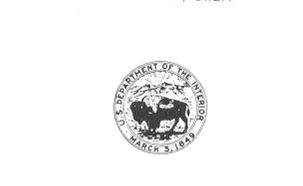
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SPECIAL NOTE
This document was prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs based on vegetation, visible hydrology, and topography in accordance with Classification of Wetlands and Deepwater Habitats of the United States (FWS/OBS - 79/31 December 1979). The aerial photographs typically reflect conditions during the specific year and season when they were taken. In addition, there is a margin of error inherent in the use of the aerial photographs. Thus, a detailed on the ground and historical interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be included on this document.
Federal, State and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, State or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities which may affect wetlands should seek the advice of appropriate Federal, State or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



NOTES TO THE USER
Wetlands which have been field examined are indicated on the map by an asterisk (*).
Additions or corrections to the wetlands information displayed on this map are solicited. Please forward such information to the address indicated.
Subsystems, Classes, Subclasses, and Water Regimes in this map were developed specifically for NATIONAL WETLANDS INVENTORY mapping.
Some areas designated as RASBA, RASBW, or RASBJ (INTERMITTENT STREAMS) may not meet the definition of wetland.
This map uses the class Unconsolidated Shore (US), On earlier NWI maps the class was designated Beach/Bar (BB) or Flat (FL). Subclasses remain the same in both versions.



U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Prepared by National Wetlands Inventory
1987

AERIAL PHOTOGRAPHY
DATE: 11/83
SCALE: 1:58,000
TYPE: CIR

SYSTEM	CLASS	SUBCLASS
M - MARINE	1 - SUBTIDAL	2 - INTERTIDAL
E - ESTUARINE	1 - SUBTIDAL	2 - INTERTIDAL
R - RIVERINE	1 - TIDAL	2 - LOWER PERENNIAL
L - LACUSTRINE	1 - LIMNETIC	2 - LITTORAL
P - PALUSTRINE	1 - TIDAL	2 - LOWER PERENNIAL

WATER REGIME	WATER CHEMISTRY	SOIL	SPECIAL MODIFIERS			
Non-Tidal A. Terrestrial Flooded B. Seasonally Flooded C. Intermittently Flooded D. Intermittently Flooded E. Intermittently Flooded F. Intermittently Flooded G. Intermittently Flooded H. Intermittently Flooded I. Intermittently Flooded J. Intermittently Flooded K. Artificially Flooded L. Seasonally Flooded M. Intermittently Flooded N. Intermittently Flooded O. Intermittently Flooded P. Intermittently Flooded Q. Intermittently Flooded R. Intermittently Flooded S. Intermittently Flooded T. Intermittently Flooded U. Intermittently Flooded V. Intermittently Flooded W. Intermittently Flooded X. Intermittently Flooded Y. Intermittently Flooded Z. Intermittently Flooded	Tidal 1. Salinity 2. Temperature 3. Turbidity 4. Dissolved Oxygen 5. pH 6. Conductivity 7. Hardness 8. Sulfate 9. Nitrate 10. Ammonia 11. Phosphate 12. Silica 13. Iron 14. Manganese 15. Zinc 16. Copper 17. Lead 18. Cadmium 19. Mercury 20. Selenium 21. Arsenic 22. Boron 23. Fluoride 24. Chloride 25. Bromide 26. Iodide 27. Nitrite 28. Nitrogen 29. Phosphorus 30. Sulfur 31. Silicon 32. Magnesium 33. Calcium 34. Potassium 35. Sodium 36. Chlorine 37. Fluorine 38. Bromine 39. Iodine 40. Selenium 41. Arsenic 42. Boron 43. Fluoride 44. Chloride 45. Bromide 46. Iodide 47. Nitrite 48. Nitrogen 49. Phosphorus 50. Sulfur 51. Silicon 52. Magnesium 53. Calcium 54. Potassium 55. Sodium 56. Chlorine 57. Fluorine 58. Bromine 59. Iodine 60. Selenium 61. Arsenic 62. Boron 63. Fluoride 64. Chloride 65. Bromide 66. Iodide 67. Nitrite 68. Nitrogen 69. Phosphorus 70. Sulfur 71. Silicon 72. Magnesium 73. Calcium 74. Potassium 75. Sodium 76. Chlorine 77. Fluorine 78. Bromine 79. Iodine 80. Selenium 81. Arsenic 82. Boron 83. Fluoride 84. Chloride 85. Bromide 86. Iodide 87. Nitrite 88. Nitrogen 89. Phosphorus 90. Sulfur 91. Silicon 92. Magnesium 93. Calcium 94. Potassium 95. Sodium 96. Chlorine 97. Fluorine 98. Bromine 99. Iodine 100. Selenium 101. Arsenic 102. Boron 103. Fluoride 104. Chloride 105. Bromide 106. Iodide 107. Nitrite 108. Nitrogen 109. Phosphorus 110. Sulfur 111. Silicon 112. Magnesium 113. Calcium 114. Potassium 115. Sodium 116. Chlorine 117. Fluorine 118. Bromine 119. Iodine 120. Selenium 121. Arsenic 122. Boron 123. Fluoride 124. Chloride 125. Bromide 126. Iodide 127. Nitrite 128. Nitrogen 129. Phosphorus 130. Sulfur 131. Silicon 132. Magnesium 133. Calcium 134. Potassium 135. Sodium 136. Chlorine 137. Fluorine 138. Bromine 139. Iodine 140. Selenium 141. Arsenic 142. Boron 143. Fluoride 144. Chloride 145. Bromide 146. Iodide 147. Nitrite 148. Nitrogen 149. Phosphorus 150. Sulfur 151. Silicon 152. Magnesium 153. Calcium 154. Potassium 155. Sodium 156. Chlorine 157. Fluorine 158. Bromine 159. Iodine 160. Selenium 161. Arsenic 162. Boron 163. Fluoride 164. Chloride 165. Bromide 166. Iodide 167. Nitrite 168. Nitrogen 169. Phosphorus 170. Sulfur 171. Silicon 172. Magnesium 173. Calcium 174. Potassium 175. Sodium 176. Chlorine 177. Fluorine 178. Bromine 179. Iodine 180. Selenium 181. Arsenic 182. Boron 183. Fluoride 184. Chloride 185. Bromide 186. Iodide 187. Nitrite 188. Nitrogen 189. Phosphorus 190. Sulfur 191. Silicon 192. Magnesium 193. Calcium 194. Potassium 195. Sodium 196. Chlorine 197. Fluorine 198. Bromine 199. Iodine 200. Selenium 201. Arsenic 202. Boron 203. Fluoride 204. Chloride 205. Bromide 206. Iodide 207. Nitrite 208. Nitrogen 209. Phosphorus 210. Sulfur 211. Silicon 212. Magnesium 213. Calcium 214. Potassium 215. Sodium 216. Chlorine 217. Fluorine 218. Bromine 219. Iodine 220. Selenium 221. Arsenic 222. Boron 223. Fluoride 224. Chloride 225. Bromide 226. Iodide 227. Nitrite 228. Nitrogen 229. Phosphorus 230. Sulfur 231. Silicon 232. Magnesium 233. Calcium 234. Potassium 235. Sodium 236. Chlorine 237. Fluorine 238. Bromine 239. Iodine 240. Selenium 241. Arsenic 242. Boron 243. Fluoride 244. Chloride 245. Bromide 246. Iodide 247. Nitrite 248. Nitrogen 249. Phosphorus 250. Sulfur 251. Silicon 252. Magnesium 253. Calcium 254. Potassium 255. Sodium 256. Chlorine 257. Fluorine 258. Bromine 259. Iodine 260. Selenium 261. Arsenic 262. Boron 263. Fluoride 264. Chloride 265. Bromide 266. Iodide 267. Nitrite 268. Nitrogen 269. Phosphorus 270. Sulfur 271. Silicon 272. Magnesium 273. Calcium 274. Potassium 275. Sodium 276. Chlorine 277. Fluorine 278. Bromine 279. Iodine 280. Selenium 281. Arsenic 282. Boron 283. Fluoride 284. Chloride 285. Bromide 286. Iodide 287. Nitrite 288. Nitrogen 289. Phosphorus 290. Sulfur 291. Silicon 292. Magnesium 293. Calcium 294. Potassium 295. Sodium 296. Chlorine 297. Fluorine 298. Bromine 299. Iodine 300. Selenium 301. Arsenic 302. Boron 303. Fluoride 304. Chloride 305. Bromide 306. Iodide 307. Nitrite 308. Nitrogen 309. Phosphorus 310. Sulfur 311. Silicon 312. Magnesium 313. Calcium 314. Potassium 315. Sodium 316. Chlorine 317. Fluorine 318. Bromine 319. Iodine 320. Selenium 321. Arsenic 322. Boron 323. Fluoride 324. Chloride 325. Bromide 326. Iodide 327. Nitrite 328. Nitrogen 329. Phosphorus 330. Sulfur 331. Silicon 332. Magnesium 333. Calcium 334. Potassium 335. Sodium 336. Chlorine 337. Fluorine 338. Bromine 339. Iodine 340. Selenium 341. Arsenic 342. Boron 343. Fluoride 344. Chloride 345. Bromide 346. Iodide 347. Nitrite 348. Nitrogen 349. Phosphorus 350. Sulfur 351. Silicon 352. Magnesium 353. Calcium 354. Potassium 355. Sodium 356. Chlorine 357. Fluorine 358. Bromine 359. Iodine 360. Selenium 361. Arsenic 362. Boron 363. Fluoride 364. Chloride 365. Bromide 366. Iodide 367. Nitrite 368. Nitrogen 369. Phosphorus 370. Sulfur 371. Silicon 372. Magnesium 373. Calcium 374. Potassium 375. Sodium 376. Chlorine 377. Fluorine 378. Bromine 379. Iodine 380. Selenium 381. Arsenic 382. Boron 383. Fluoride 384. Chloride 385. Bromide 386. Iodide 387. Nitrite 388. Nitrogen 389. Phosphorus 390. Sulfur 391. Silicon 392. Magnesium 393. Calcium 394. Potassium 395. Sodium 396. Chlorine 397. Fluorine 398. Bromine 399. Iodine 400. Selenium 401. Arsenic 402. Boron 403. Fluoride 404. Chloride 405. Bromide 406. Iodide 407. Nitrite 408. Nitrogen 409. Phosphorus 410. Sulfur 411. Silicon 412. Magnesium 413. Calcium 414. Potassium 415. Sodium 416. Chlorine 417. Fluorine 418. Bromine 419. Iodine 420. Selenium 421. Arsenic 422. Boron 423. Fluoride 424. Chloride 425. Bromide 426. Iodide 427. Nitrite 428. Nitrogen 429. Phosphorus 430. Sulfur 431. Silicon 432. Magnesium 433. Calcium 434. Potassium 435. Sodium 436. Chlorine 437. Fluorine 438. Bromine 439. Iodine 440. Selenium 441. Arsenic 442. Boron 443. Fluoride 444. Chloride 445. Bromide 446. Iodide 447. Nitrite 448. Nitrogen 449. Phosphorus 450. Sulfur 451. Silicon 452. Magnesium 453. Calcium 454. Potassium 455. Sodium 456. Chlorine 457. Fluorine 458. Bromine 459. Iodine 460. Selenium 461. Arsenic 462. Boron 463. Fluoride 464. Chloride 465. Bromide 466. Iodide 467. Nitrite 468. Nitrogen 469. Phosphorus 470. Sulfur 471. Silicon 472. Magnesium 473. Calcium 474. Potassium 475. Sodium 476. Chlorine 477. Fluorine 478. Bromine 479. 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Phosphorus 630. Sulfur 631. Silicon 632. Magnesium 633. Calcium 634. Potassium 635. Sodium 636. Chlorine 637. Fluorine 638. Bromine 639. Iodine 640. Selenium 641. Arsenic 642. Boron 643. Fluoride 644. Chloride 645. Bromide 646. Iodide 647. Nitrite 648. Nitrogen 649. Phosphorus 650. Sulfur 651. Silicon 652. Magnesium 653. Calcium 654. Potassium 655. Sodium 656. Chlorine 657. Fluorine 658. Bromine 659. Iodine 660. Selenium 661. Arsenic 662. Boron 663. Fluoride 664. Chloride 665. Bromide 666. Iodide 667. Nitrite 668. Nitrogen 669. Phosphorus 670. Sulfur 671. Silicon 672. Magnesium 673. Calcium 674. Potassium 675. Sodium 676. Chlorine 677. Fluorine 678. Bromine 679. Iodine 680. Selenium 681. Arsenic 682. Boron 683. Fluoride 684. Chloride 685. Bromide 686. Iodide 687. Nitrite 688. Nitrogen 689. Phosphorus 690. Sulfur 691. Silicon 692. Magnesium 693. Calcium 694. Potassium 695. Sodium 696. Chlorine 697. Fluorine 698. Bromine 699. Iodine 700. Selenium 701. Arsenic 702. Boron 703. 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Fluorine 778. Bromine 779. Iodine 780. Selenium 781. Arsenic 782. Boron 783. Fluoride 784. Chloride 785. Bromide 786. Iodide 787. Nitrite 788. Nitrogen 789. Phosphorus 790. Sulfur 791. Silicon 792. Magnesium 793. Calcium 794. Potassium 795. Sodium 796. Chlorine 797. Fluorine 798. Bromine 799. Iodine 800. Selenium 801. Arsenic 802. Boron 803. Fluoride 804. Chloride 805. Bromide 806. Iodide 807. Nitrite 808. Nitrogen 809. Phosphorus 810. Sulfur 811. Silicon 812. Magnesium 813. Calcium 814. Potassium 815. Sodium 816. Chlorine 817. Fluorine 818. Bromine 819. Iodine 820. Selenium 821. Arsenic 822. Boron 823. Fluoride 824. Chloride 825. Bromide 826. Iodide 827. Nitrite 828. Nitrogen 829. Phosphorus 830. Sulfur 831. Silicon 832. Magnesium 833. Calcium 834. Potassium 835. Sodium 836. Chlorine 837. Fluorine 838. Bromine 839. Iodine 840. Selenium 841. Arsenic 842. Boron 843. Fluoride 844. Chloride 845. Bromide 846. Iodide 847. Nitrite 848. Nitrogen 849. Phosphorus 850. Sulfur 851. Silicon 852. Magnesium 853. Calcium 854. Potassium 855. Sodium 856. Chlorine 857. Fluorine 858. Bromine 859. Iodine 860. Selenium 861. Arsenic 862. Boron 863. Fluoride 864. Chloride 865. Bromide 866. Iodide 867. Nitrite 868. Nitrogen 869. Phosphorus 870. Sulfur 871. Silicon 872. Magnesium 873. Calcium 874. Potassium 875. Sodium 876. Chlorine 877. Fluorine 878. Bromine 879. Iodine 880. Selenium 881. Arsenic 882. Boron 883. Fluoride 884. Chloride 885. Bromide 886. Iodide 887. Nitrite 888. Nitrogen 889. Phosphorus 890. Sulfur 891. Silicon 892. Magnesium 893. Calcium 894. Potassium 895. Sodium 896. Chlorine 897. Fluorine 898. Bromine 899. Iodine 900. Selenium 901. Arsenic 902. Boron 903. Fluoride 904. Chloride 905. Bromide 906. Iodide 907. Nitrite 908. Nitrogen 909. Phosphorus 910. Sulfur 911. Silicon 912. Magnesium 913. Calcium 914. Potassium 915. Sodium 916. Chlorine 917. Fluorine 918. Bromine 919. Iodine 920. Selenium 921. Arsenic 922. Boron 923. Fluoride 924. Chloride 925. Bromide 926. Iodide 927. Nitrite 928. Nitrogen 929. Phosphorus 930. Sulfur 931. Silicon 932. Magnesium 933. Calcium 934. Potassium 935. Sodium 936. Chlorine 937. Fluorine 938. Bromine 939. Iodine 940. Selenium 941. Arsenic 942. Boron 943. Fluoride 944. Chloride 945. Bromide 946. Iodide 947. Nitrite 948. Nitrogen 949. Phosphorus 950. Sulfur 951. Silicon 952. Magnesium 953. Calcium 954. Potassium 955. Sodium 956. Chlorine 957. Fluorine 958. Bromine 959. Iodine 960. Selenium 961. Arsenic 962. Boron 963. Fluoride 964. Chloride 965. Bromide 966. Iodide 967. Nitrite 968. Nitrogen 969. Phosphorus 970. Sulfur 971. Silicon 972. Magnesium 973. Calcium 974. Potassium 975. Sodium 976. Chlorine 977. Fluorine 978. Bromine 979. Iodine 980. Selenium 981. Arsenic 982. Boron 983. Fluoride 984. Chloride 985. Bromide 986. Iodide 987. Nitrite 988. Nitrogen 989. Phosphorus 990. Sulfur 991. Silicon 992. Magnesium 993. Calcium 994. Potassium 995. Sodium 996. Chlorine 997. Fluorine 998. Bromine 999. Iodine 1000. Selenium	Coastal Salinity 1. Hypersaline 2. Euryhaline 3. Mesohaline 4. Oligohaline 5. Fresh	Inland Salinity 1. Hypersaline 2. Euryhaline 3. Mesohaline 4. Oligohaline 5. Fresh	pH Modifiers for all Fresh Water 1. Acid 2. Neutral 3. Alkaline	Soil 1. Organic 2. Mineral	Special Modifiers 1. Beaver 2. Partially Drained 3. Fanned 4. Diked/Impounded 5. Artificial Substrate 6. Spoil 7. Eutrophic