1. FOUR SPARROW MARSH

LAND USE

- VACANT CITY OWNED LAND
- VACANT PRIVATE LAND
- DEVELOPED LAND
- OPEN SPACE PROTECTED PRIOR TO 1987
- BUFFER THE BAY LAND PROTECTED SINCE 1987
- BUFFER THE BAY LAND FOR WHICH TRANSFER TO THE DEPARTMENT OF PARKS (DPR) IS BELIEVED IMMINENT
- BUFFER THE BAY LAND RECOMMENDED FOR PROTECTION

FLOYD BENNETT FIELD

SCALE:

500 METERS

PREPARED BY THE TRUST FOR PUBLIC LAND
**FOUR SPARROW MARSH**

**SIZE:** 65 acres of tidal wetland; 12.4 acres of filled upland

**LOCATION:** Brooklyn; Community District 18; Flatbush Avenue is the western boundary; Mill Basin Creek lies to the northeast; Floyd Bennett Field, separated from the marsh by the Belt Parkway, lies to the southeast.

**JURISDICTION/ OWNERSHIP:** Economic Development Corporation (EDC)

**ZONING:** C3

**BUFFER THE BAY; CURRENT STATUS:** Marshlands are of immediate priority for protection; residential development with buffers is planned for adjacent upland; transfer of marshes from EDC to the Parks Department (DPR) will occur when EDC upland development is initiated and when upland boundaries, including buffers, are finalized.

The marshes and the adjacent filled upland at Four Sparrow Marsh reveal different levels of human influence and, in consequence, face different fates. Tidal wetlands make up the major portion of the overall site and, while they are offered some protection by state DEC regulations, their size, integrity, and biotic richness call for an additional level of protection. The upland area to the north and west of the marsh is largely filled former wetland, and, if treated properly, serves to buffer the existing marsh from commercial development and roadways.

Transfer of the 65 acres of marshland from EDC to Department of Parks and Recreation (DPR) jurisdiction is strongly advocated by the Trust for Public Land (TPL) and the New York Audubon Society (NYCAS). The Department of City Planning (DCP) in its Comprehenive Waterfront Plan (1992), favors the transfer of marshes to the Parks Department for management as a natural area. DCP also recommends the construction of an elevated boardwalk along the wetland edge to allow for nonintrusive public access and a connection to Flatbush Ave. An alternative design would limit access to long range viewing, discouraging entry by the general public to the marshes, with the exception of researchers and students.

Although it is anticipated, the marshland transfer has yet to be achieved and probably will not occur until the residential development has been initiated.

While the western quarter of the Four Sparrow Marsh upland is currently being used as a temporary staging area for a Toys R Us expansion, the overall upland area will most likely experience multiple use, combining residential development (in the form of townhouse condominiums), open space for passive recreation, and buffer for the marshes. DCP, in the Comprehensive Waterfront Plan (1992), calls for development of the 12.4 acre upland parcel adjacent to Flatbush Avenue, zoned C-3, for residential use under R 3-2 zoning regulations and for provision of adequate buffer for the residential area.

Issued in March, 1992, the Mill Basin Guidelines for the development on the upland site (a document prepared by the collaborative effort of EDC, DCP, DPR, DEP, and DOT) attempts to balance housing development with the protection and enjoyment of adjacent natural areas. The stated overall intent of the guidelines is “to promote the creation of a high quality residential development which would feature a public open space component with views of the Mill Basin waterfront and the adjacent Four Sparrow Marsh wetland.”
The *Mill Basin Guidelines* present plans for land use, site circulation, public open space, and a description of building setbacks that will be imposed in addition to those required within an R 3-2 zoning district. Included in the site circulation plan is the description of a newly mapped public street on the western boundary with parking lot, turn around, sidewalks and green buffer. The street will provide access from Flatbush Avenue for residents of the townhouses and for a "limited public audience" visiting the portion of the upland being set aside as a parkland and preservation area. The open space component of the proposed development will be 56,000 square feet, occupying the eastern and southern boundaries of the parcel, fronting the wetlands, and will provide a woodland path through plantings of native trees and shrubs. The use of signage, an elevated observation deck, and seating along the trail indicate the potential dual function of the open space for recreation and education.

Provisions for buffers between the future townhouses and Four Sparrow Marsh and between the townhouses and the area of upland open space point to the difficulties inherent in defining appropriate buffers. The plan provides for a green buffer (with minimum depth of 20 feet) demarking the residential and public open space components of the upland, a wetland protection buffer (a minimum of 20 feet wide along the 10 foot contour line), and a woodland buffer (with an average depth of 25 feet inland from the 10 foot contour line) for the southeastern edge of the property. It should be noted that buffer depths do not reflect the different characteristics of individual wetland sites, such as biotic diversity, size, surrounding topography, and degree of human impact. At present, NY State DEC does not have a requirement for buffering filled land extending above the 10-foot contour line. The 150-foot setback from wetlands required by DEC is not applied above this elevation.

Buffers required by regulation may be particularly inadequate for wildlife habitat and other environmentally sensitive areas. In light of the habitat value of the Four Sparrow Marsh uplands, evidenced by the presence of nesting wading bird species, a minimum 150 foot setback from development is justified regardless of elevation. In addition to the setbacks, the planting of native plant communities, containing shrubs and herbaceous plants, should be required of developments contiguous with wetlands in order to mitigate the effects of surface runoff. Strong arguments can be made, with implications for all Buffer the Bay sites, for a broadening of wetland buffer, bringing buffer zone width into alignment with the state standards, excluding development within 300 feet of a wetland's landward boundary. At the very least, the criteria and process for designing buffers need to be further developed, drawing on the expertise of city agencies, such as DPR and DEP. Buffers could be proposed, for example, based on habitat mapping of woodland or field instead of on an arbitrary number of feet from a wetland boundary.

Additional safeguards, not described in the Mill Basin Guidelines, should be implemented. Close monitoring of the construction process by DPR/DEC/EDC is urged to prevent disturbance of the marsh and upland woods. Provisions should be made to prevent any runoff from the developed uplands into the marsh. Finally, plant materials proposed by the developer should be reviewed to prevent inappropriate and non-native introductions.

Management practices for the upland park, once they have been established by the developer, in consultation with the Natural Resources Group of DPR, will most likely involve the residents of the new complex and will probably require close monitoring by the Parks Department. As it is designed to accommodate only a small number of visitors, access should be regulated. Access to Toys R Us and Sea Travelers Marina complicates the situation by attracting additional traffic to the area. The western boundary of the upland should be closed to any exchange with the commercial sites, thereby benefitting resi-
The guidelines for interfacing residential development, upland buffer and park, and the predominating marshland are encouraging, to the extent that they promote multiple use with an underlying theme of protection of the natural resource. Four Sparrow Marsh will be integrated into a much broader scheme, however, as it is one of five northshore Buffer the Bay sites that may become key points of open space along the Shore Blue Greenway proposed by the Parks Department. As Four Sparrow Marsh is too sensitive for a bicycle path connector, integration will take place in the form of street access to the uplands, with DPR signage. Limited access to the marsh by boardwalk may be possible. Because of the ongoing and proposed development in the upland area and the critical nature of the marsh itself, Four Sparrow Marsh, along with as much of the buffering upland as possible, have been placed in the category of immediate priority for protection. The ULURP (Uniform Land Use Review Procedure) process and parks designation of Four Sparrow Marsh should be expedited, regardless of the phase of the upland development.

The conversion of a large portion of the Four Sparrow Marsh upland to residential development, however, may not be inevitable. An alternative protection strategy is favored by the New York City Audubon Society. In this strategy, the upland would be left entirely free of development and would be reclaimed to a natural state. The site would therefore be allowed to fulfill its roles as buffer for adjacent marshlands and as wildlife habitat. The recent Toys 'R Us expansion and parking lot construction, through the temporary use of the upland, has resulted in the destruction of habitat of a state threatened species, the diamondback terrapin. Other species that frequent the marsh and its fringes, particularly foraging, roosting, or nesting birds, would benefit from the upland’s inclusion in the proposed parkland. The fully protected upland could incorporate a nature trail to an overlook, with interpretive signage, providing views of Four Sparrow Marsh. Finally, NYCAS maintains that a boardwalk in the marsh would require regular monitoring to prevent vandalism and misuse, and that Four Sparrow Marsh can be viewed and experienced most appropriately from the uplands.