

Commissioners
William Brauer
Diana Gunderson
KerryLynn Hunter
Jim Jones
Frank Lenertz
James Lootens
Don Voelz

Gary Major
Executive Director
gmajor@we-goparks.org

Jesse Felix
Superintendent of Parks
jfelix@we-goparks.org

Leslie Hoffmann
Superintendent of Finance
lhoffmann@we-goparks.org

August 28, 2008

**STB Finance Docket No.35087
Comments to the Surface Transportation Board**

Thank you for allowing me to address the board.

My name is Jesse Felix and I am a resident of the community of Bartlett and I am the Superintendent of Parks for the West Chicago Park District.

A key factor when one decides to move a corporation or most important, a family, to a community is the quality of life.

Parks, I have always felt, demonstrate community pride and give the residents and visitors a positive impression to what a community has to offer. Active and passive recreation are important factors to the quality of life in a community. They are important factors to remember when considering this proposal however minor the board may feel this transaction may be.

We are very proud of our parks in West Chicago. They are more than just athletic fields and open spaces. Our parks contain plants, animals and the inanimate. If I do not object to this proposal which will bring additional train traffic through the community and negatively influence the parks, I would be doing a disservice to the community I work for and the community I live in.

Commissioner Buttrey is correct in his concern and assessment that even "the most far reaching mitigation would be enough to offset or balance the environmental detriments that would flow from this proposal".

No one came to the West Chicago Park District and asked about our adjacent properties or future plans for development. Reed-Keppler Park has 500,000 visitors use this site, annually, for recreation and special events. Reed-Keppler Park contains 20 acres of high quality wetlands that run along the EJ&E.

Pioneer Park has a master plan to redevelop the existing park amenities and the land that was acquired along the EJ&E. This park will see an increase in usage once the redevelopment has occurred beginning in 2009. Pioneer Park is our hub park for the south side of West Chicago.

One major park that was missed, in the report, was Manville Oaks Park.



Manville Oaks is an 184 park site that runs along the east side of the EJ&E across from Fermi Lab. This park has a master plan for development that has recently been completed. We would anticipate at least two hundred and fifty thousand visitors, to the park, to attend concerts, play disc golf, attend sporting events or walk, jog and bike. Within Manville Oaks is Kress Creek, which was recently cleaned up by the Kerr-McGee Corporation under the watchful eye of the EPA and please note that Wilson St. was vacated by the Winfield Township and is now the property of the park district.

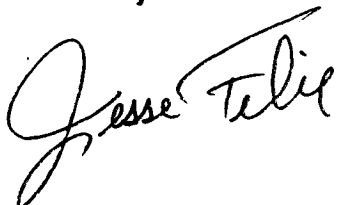
When the ICC approved the purchase of the Chicago Northwestern by the Union Pacific, no environmental impact statement was ever done. Vibration by the additional train traffic may have had an adverse affect on our building at 157 W. Washington St. The increased train traffic, after the purchase, has had an adverse affect on our location also.

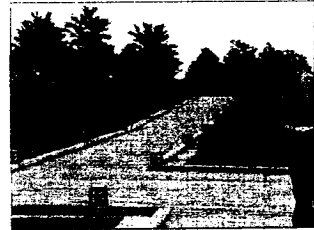
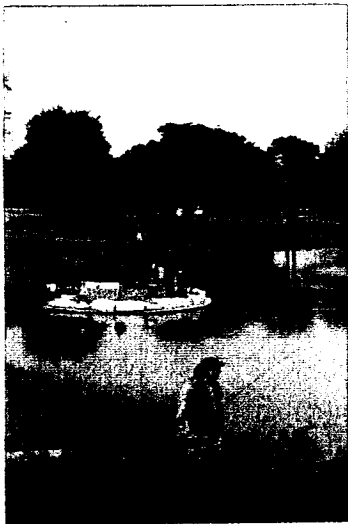
Please keep in mind what the visionary landscape architect Frederick Law Olmstead said when setting the standards for parks throughout America. "Parks provide a means of a certain kind of refreshment of the mind and nerves which most city dwellers greatly need and which they are known to derive in large measure from the enjoyment of suitable scenery". Naturalist John Muir stated "thousands of nerve shaken, over civilized people find that going to mountains, forests, and deserts is sort of like going home. These areas are useful not only as fountains of timber and water but fountains of life". What both of these men said are as applicable today as when they said it. Parks provide these oasis's of where a person can come and refresh not only the body but the mind as well.

Chicago landscape planner, Jens Jensen wrote that "Everyone is entitled to a home where the sun, stars, open fields, giant trees and smiling flowers are free to teach an undisturbed lesson of life". We have strayed from that vision by not properly planning for expansion not only in the city but as far west as you can imagine.

Sustainable development is carefully planned and results in public/private investments that lead to increases in the quality of life. If the board approves this purchase, let the record show that the West Chicago Park District will seek mitigation at these park sites due to noise, impact on wetlands, safety and tax cap. It is not too late to slow the process down, stop the purchase or really study what is at stake for the quality of life for the communities that will be affected by this purchase.

Thank you.

A handwritten signature in black ink, appearing to read "Jesse Telie". The signature is fluid and cursive, with the first name "Jesse" written in a larger, more prominent script than the last name "Telie".



West Chicago Park
District

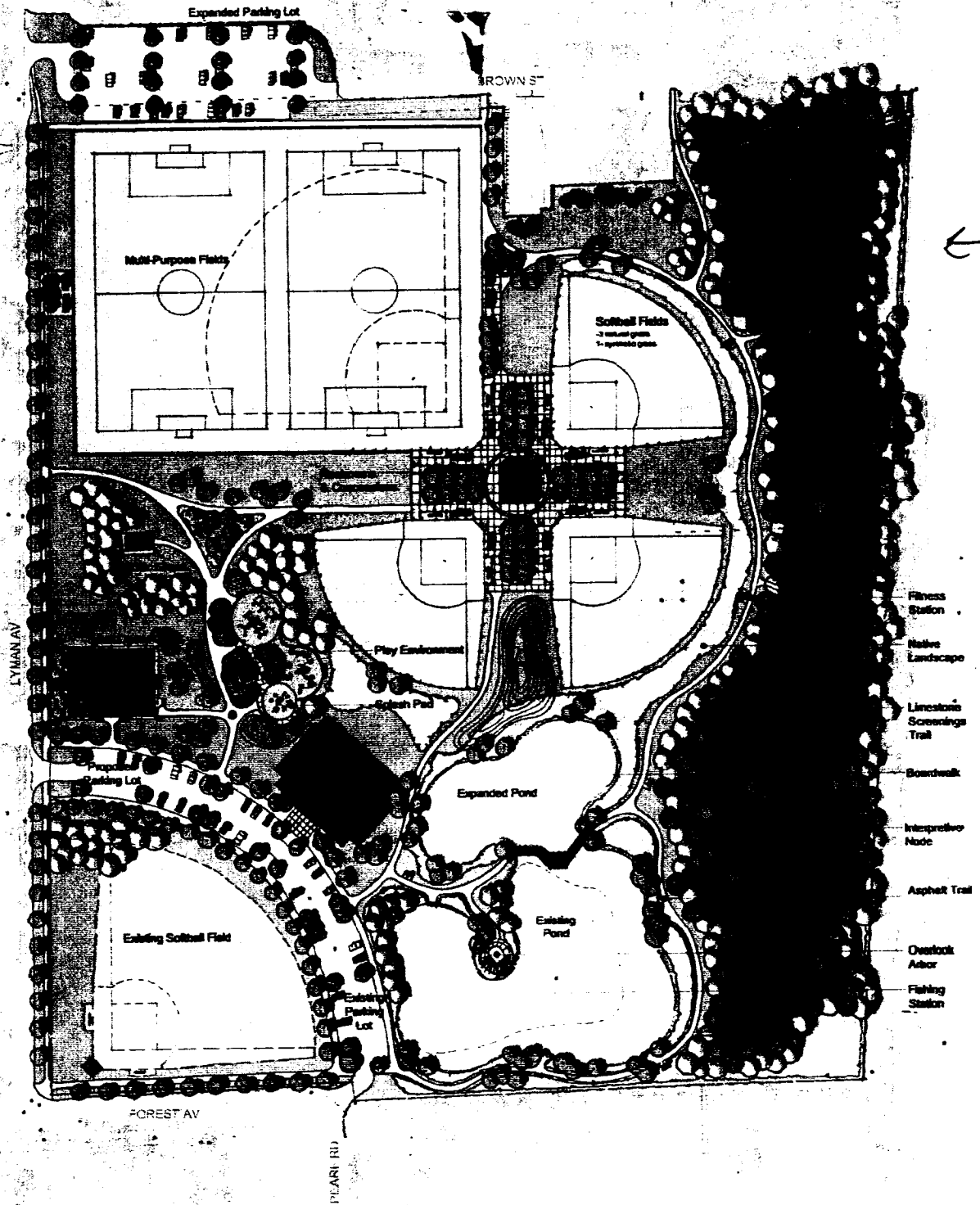
Manville Oaks Park

Perspective and Character Images

West Chicago, Illinois

Hickcock
Design Group
Creating Better Places™
1000 North Dearborn Street
Chicago, Illinois 60610
312.329.1100
www.hickcockdesign.com

Existing Baseball Field



EJ+E

West Chicago
Park District

Pioneer Park Master Plan West Chicago Park District

Hitchcock
Design Group
Creating Better Places™

1" = 30' 60' 180'
NORTH
SCALE: 1" = 60'

WETLAND

REED-KEPPLER PARK

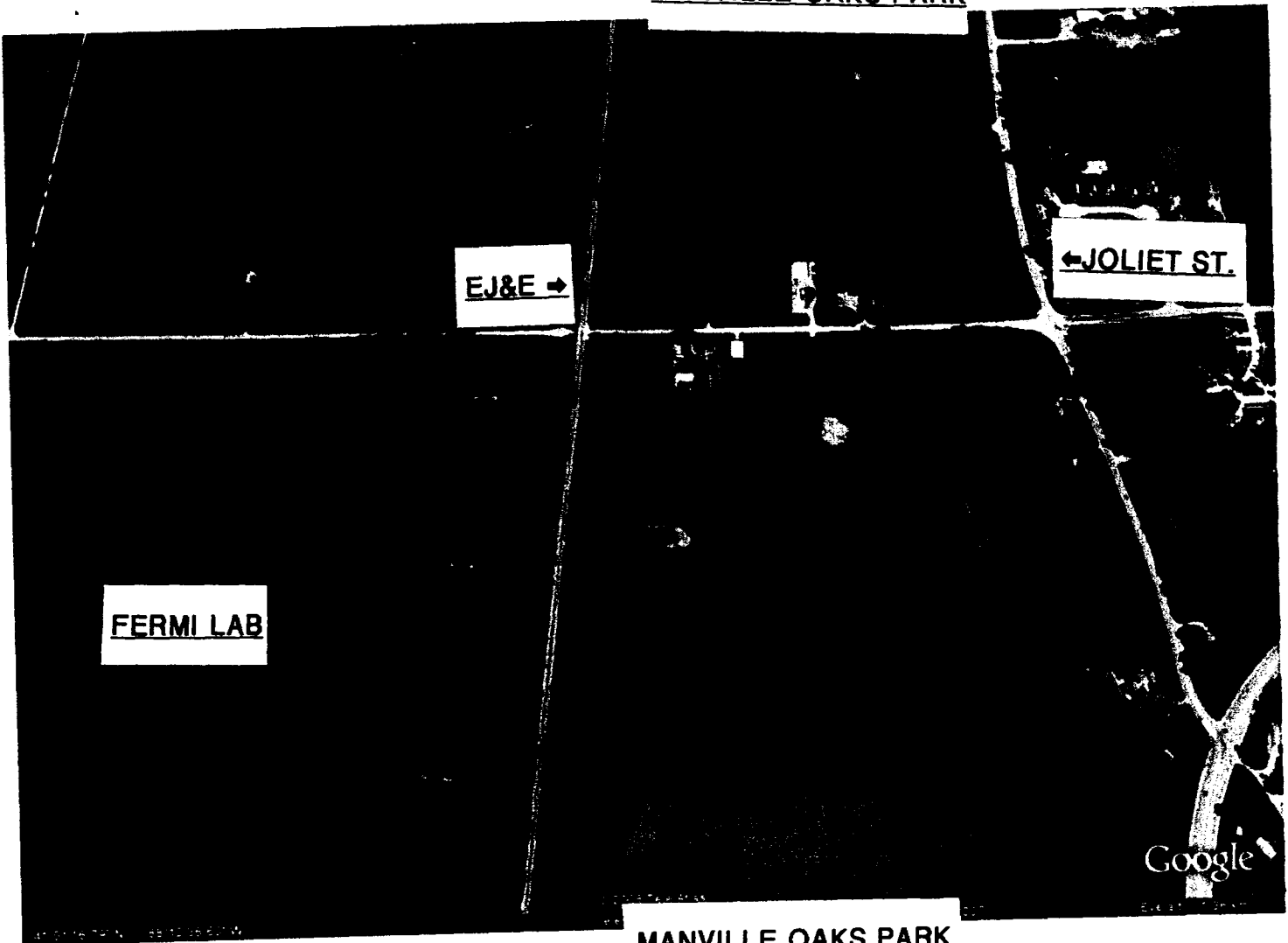
EJ&E →

WETLAND

Google



MANVILLE OAKS PARK



FERMI LAB

EJ&E →

← JOLIET ST.

Google

MANVILLE OAKS PARK

REPORT ON THE COST OF FLORAL RESTORATION IN A PLANT COMMUNITY

This report outlines the method and principles behind a system of assessing the cost the Forest Preserve District could expect to incur in attempting to reconstruct an ecosystem which has been destroyed by whatever means.

The reconstruction cost index, as developed here, is based on two already established systems for assessing: 1) the overall quality of a plant community (ecosystem); and 2) the replacement cost of trees in a forest situation.

The first of these (Swink), assesses the overall quality of a plant community based on the rarity, nativity, fidelity and importance to the community of each individual species. Two important numbers are derived from the formula: 1) the NATURAL AREA RATING INDEX (NARI) which indicates a degree of ecological value; and 2) the MEAN RATED QUALITY (MRQ) which assesses the overall degree of quality of plants. Once the general value and quality of an ecosystem are known a fair assessment of the reconstruction can be made. This is based on the premise that higher quality communities have more native plants and a greater number of rare species, thus, a higher cost of replacing them.

The second system (Neely), which determines a replacement cost of trees, was utilized in a study of woodland plots throughout the county to establish a replacement cost within a forest ecosystem. Comparison of the actual replacement cost, as derived from plot data, and the MEAN RATED QUALITY (MRQ) of the woodlands, demonstrated a relationship which can be expressed by the formulae:

$$I = 3.5 Q^2$$

Where Q is the MEAN RATED QUALITY of the community and I is the floral restoration Cost Index expressed in square meters.

FLORAL RESTORATION COST INDEX

Introduction

The Forest Preserve District has seen the need to develop an index by which it can evaluate objectively, from a monetary standpoint, the degree to which a destructive incident or construction activity has had a deleterious impact on District land. The District has developed a de facto policy which applies evenly to any and all such impacts. The following outlines the index, addresses the concept of a Floral Restoration Cost Index, and defines its rationale and application.

There are two principal reasons for incorporating a Floral Restoration Cost Index into District policy. One revolves around the mandate expressed in Chapter 97 1/2 of the Illinois Revised Statutes. The other centers on the District's desire to encourage preservation of Natural Areas, and to create an appreciation for their complexity and irreplaceability. In addition, it is important for the District to be able to demonstrate that restoration of these areas, while potentially feasible, is often financially and practicably prohibitive.

Chapter 97 1/2 of the Illinois Revised Statutes mandates that all forest preserve districts ". . . acquire lands . . . for the purpose of protecting and preserving the flora, fauna, and scenic beauty . . . and to restore, restock, protect, and preserve . . . such lands together with their flora and fauna, as nearly as may be in their natural state and condition for the purpose of education, pleasure, and recreation of the public."

From a practical standpoint, the District sees a need to

maintain a high level of quality in its natural areas for their value in terms of education, scientific research, species and community preservation, and passive recreation by the people of DuPage County. If this goal is to be achieved, the District policy must provide mechanisms which not only encourage the preservation of natural lands, but also provide the means by which the destruction or degradation of natural land can be mitigated. Encouragement of natural land preservation can be effected by demonstrating a relationship between their natural quality and a monetary value. The mitigation can take the form of monetary compensation if and when a parcel of natural land is very seriously compromised or by physical restoration -- by the responsible party -- in less serious cases. It is important to note, however, that the monetary costs of restoring an ecosystem are in no way linked to the real assessed value of the land. The former is strictly determined by physical costs involved in the restoration of the plant community which previously existed on a given site, while the latter is determined by assessing the land's value in terms of use by man.

Development and Application of the Floral Restoration Index

The basis for developing a Floral Restoration Cost Index is premised on the replacement cost of trees in woodland communities. The cost of tree replacement has been legally fixed for various situations by the International Society of Arboriculture (Neely, 1975) and is thus an established system from which to work. Typically this system has been utilized by the District and others to assess the replacement cost of individual trees. One could logically carry this a step further and state that the obliteration of a grove of trees

could be compensated by a summation of the costs necessary to replace all trees within a grove. A relationship is demonstrated between the replacement cost of all or a part of the trees within a grove and the Mean Rated Quality (for the purposes of this report the Mean Rated Quality will be abbreviated : Q) for all or a part of that grove. The relationship between the Mean Rated Quality of wooded communities and non-wooded communities has already been established (see Swink & Wilhelm, 1979.)

The relationship between the replacement cost of a given area of trees, and the Mean Rated quality for that area, regardless of its size, has been demonstrated locally through a critical study of numerous 1-acre plot samples within groves throughout the county (an example and substantiating data can be found in Appendix A). This relationship takes the form:

$$C = 3.5Q^2$$

where C is the total replacement of all trees (expressed in dollars per M²), and Q is the Mean Rated Quality.

Neely (1975) suggests a basic replacement cost of ten dollars per square inch of cross-sectional area at breast height in the trunk, which should then be tempered by such factors as tree type, condition, location, etc. It is felt, however, that such tempering factors are somewhat compensated for, in a plant community situation, by the cost of replacing the remainder of the flora (non-tree species). For this reason a basic replacement cost of ten dollars per square inch has been utilized by the District in the past and forms the basis for the relationship stated above. This basic replacement price does not, however, take into account the rising costs of goods

and services. Therefore the basic replacement price of \$10 per square inch (as of January 1, 1979) will be adjusted each January first according to the annual cost of living (inflation) rate.

The replacement cost determined for all trees in a given area is seen to actually equal the cost of replacing all of the flora in that area. The replacement cost, therefore, actually constitutes an index (I) to the cost of total flora restoration, to be known henceforth as the Floral Replacement Cost Index. This index can be expressed in the formula:

$$I = 3.5Q^2$$

where I is the Floral Restoration Cost Index in M .

This index can be applied to restoration cost assessment of all lands, whether wooded or not, because the concept of Q is uniform to all plant communities. Swink & Wilhelm (1979) state that plant communities assessed by their Natural Area Rating System are done so through a "consistent philosophy" which can be applied evenly to all types of communities. From this, it can be concluded that Mean Rated Quality of 4.0 assessed for a particular woodland is conceptually equal to any non-wooded community having an equivalent Mean Rated Quality. Taking this one step further, the restoration costs (I) would be essentially the same, despite the obvious flora differences.

The Mean Rated Quality is statistically uniform throughout any relatively uniform plant community, as demonstrated by studies of the 1-acre plot data (see Appendix B). This relationship is useful in the assessment of damages to a part of a community where the remainder has not been degraded in the process.

Examination of the remaining flora will yield a Mean Rated

Quality which can be considered comparable to the part destroyed. In other cases, where part of a community has merely degraded, a comparison of the Mean Rated Qualities derived from both the disturbed and undisturbed portions will yield a degradation differential (the arithmetic difference between the Qs of the two portions) which can be utilized to figure the cost of restoration incurred to return the affected area to a quality comparable to that of the undisturbed portion.

Generally speaking, any community with a Mean Rated Quality of 4.0 or greater can be considered as irrestorable, while for those with lower Mean Rated Qualities, restoration may be feasible, but often at a prohibitive cost. Should the Mean Rated Quality actually fall below 0 (zero), a minimum charge of one cent per square meter will be assessed along with the actual replacement cost of any tree removed. Several examples of such restoration costs are provided in Appendix C.

The Forest Preserve District will continue on a program of mapping and assessing the Mean Rated Qualities of all of its floral communities. Maps (prepared de facto) of these communities and their Mean Rated Qualities will be kept on file; and be available for an immediate assessment of the Floral Restoration Cost Index for all damages -- whether they include those already incurred, or those apt to result from proposed construction activities.

FLORAL RESTORATION COST INDEX

Introduction

The Forest Preserve District has seen the need to develop an index by which it can evaluate objectively, from a monetary standpoint, the degree to which a destructive incident or construction activity has had a deleterious impact on District land. The District has developed a de facto policy which applies evenly to any and all such impacts. The following outlines the index, addresses the concept of a Floral Restoration Cost Index, and defines its rationale and application.

There are two principal reasons for incorporating a Floral Restoration Cost Index into District policy. One revolves around the mandate expressed in Chapter 97 1/2 of the Illinois Revised Statutes. The other centers on the District's desire to encourage preservation of Natural Areas, and to create an appreciation for their complexity and irreplaceability. In addition, it is important for the District to be able to demonstrate that restoration of these areas, while potentially feasible, is often financially and practicably prohibitive.

Chapter 97 1/2 of the Illinois Revised Statutes mandates that all forest preserve districts ". . . acquire lands . . . for the purpose of protecting and preserving the flora, fauna, and scenic beauty . . . and to restore, restock, protect, and preserve . . . such lands together with their flora and fauna, as nearly as may be in their natural state and condition for the purpose of education, pleasure, and recreation of the public."

From a practical standpoint, the District sees a need to

maintain a high level of quality in its natural areas for their value in terms of education, scientific research, species and community preservation, and passive recreation by the people of DuPage County. If this goal is to be achieved, the District policy must provide mechanisms which not only encourage the preservation of natural lands, but also provide the means by which the destruction or degradation of natural land can be mitigated. Encouragement of natural land preservation can be effected by demonstrating a relationship between their natural quality and a monetary value. The mitigation can take the form of monetary compensation if and when a parcel of natural land is very seriously compromised or by physical restoration -- by the responsible party -- in less serious cases. It is important to note, however, that the monetary costs of restoring an ecosystem are in no way linked to the real assessed value of the land. The former is strictly determined by physical costs involved in the restoration of the plant community which previously existed on a given site, while the latter is determined by assessing the land's value in terms of use by man.

Development and Application of the Floral Restoration Index

The basis for developing a Floral Restoration Cost Index is premised on the replacement cost of trees in woodland communities. The cost of tree replacement has been legally fixed for various situations by the International Society of Arboriculture (Neely, 1975) and is thus an established system from which to work. Typically this system has been utilized by the District and others to assess the replacement cost of individual trees. One could logically carry this a step further and state that the obliteration of a grove of trees

could be compensated by a summation of the costs necessary to replace all trees within a grove. A relationship is demonstrated between the replacement cost of all or a part of the trees within a grove and the Mean Rated Quality (for the purposes of this report the Mean Rated Quality will be abbreviated : Q) for all or a part of that grove. The relationship between the Mean Rated Quality of wooded communities and non-wooded communities has already been established (see Swink & Wilhelm, 1979.)

The relationship between the replacement cost of a given area of trees, and the Mean Rated quality for that area, regardless of its size, has been demonstrated locally through a critical study of numerous 1-acre plot samples within groves throughout the county (an example and substantiating data can be found in Appendix A). This relationship takes the form:

$$C = 3.5Q^2$$

where C is the total replacement of all trees (expressed in dollars per M^2), and Q is the Mean Rated Quality.

Neely (1975) suggests a basic replacement cost of ten dollars per square inch of cross-sectional area at breast height in the trunk, which should then be tempered by such factors as tree type, condition, location, etc. It is felt, however, that such tempering factors are somewhat compensated for, in a plant community situation, by the cost of replacing the remainder of the flora (non-tree species). For this reason a basic replacement cost of ten dollars per square inch has been utilized by the District in the past and forms the basis for the relationship stated above. This basic replacement price does not, however, take into account the rising costs of goods

and services. Therefore the basic replacement price of \$10 per square inch (as of January 1, 1979) will be adjusted each January first according to the annual cost of living (inflation) rate.

The replacement cost determined for all trees in a given area is seen to actually equal the cost of replacing all of the flora in that area. The replacement cost, therefore, actually constitutes an index (I) to the cost of total flora restoration, to be known henceforth as the Floral Replacement Cost Index. This index can be expressed in the formula:

$$I = 3.5Q^2$$

where I is the Floral Restoration Cost Index in M .

This index can be applied to restoration cost assessment of all lands, whether wooded or not, because the concept of Q is uniform to all plant communities. Swink & Wilhelm (1979) state that plant communities assessed by their Natural Area Rating System are done so through a "consistent philosophy" which can be applied evenly to all types of communities. From this, it can be concluded that Mean Rated Quality of 4.0 assessed for a particular woodland is conceptually equal to any non-wooded community having an equivalent Mean Rated Quality. Taking this one step further, the restoration costs (I) would be essentially the same, despite the obvious flora differences.

The Mean Rated Quality is statistically uniform throughout any relatively uniform plant community, as demonstrated by studies of the 1-acre plot data (see Appendix B). This relationship is useful in the assessment of damages to a part of a community where the remainder has not been degraded in the process.

Examination of the remaining flora will yield a Mean Rated

Quality which can be considered comparable to the part destroyed. In other cases, where part of a community has merely degraded, a comparison of the Mean Rated Qualities derived from both the disturbed and undisturbed portions will yield a degradation differential (the arithmetic difference between the Qs of the two portions) which can be utilized to figure the cost of restoration incurred to return the affected area to a quality comparable to that of the undisturbed portion.

Generally speaking, any community with a Mean Rated Quality of 4.0 or greater can be considered as irrestorable, while for those with lower Mean Rated Qualities, restoration may be feasible, but often at a prohibitive cost. Should the Mean Rated Quality actually fall below 0 (zero), a minimum charge of one cent per square meter will be assessed along with the actual replacement cost of any tree removed. Several examples of such restoration costs are provided in Appendix C.

The Forest Preserve District will continue on a program of mapping and assessing the Mean Rated Qualities of all of its floral communities. Maps (prepared de facto) of these communities and their Mean Rated Qualities will be kept on file; and be available for an immediate assessment of the Floral Restoration Cost Index for all damages -- whether they include those already incurred, or those apt to result from proposed construction activities.

SITE: REED KEPLER PARK SOUTH
 PRES: WEST CHICAGO PRAIRIE
 DATE: SEPTEMBER 8, 1992
 BY: W. LAMPA
 FILE: C:\WC\WCFL0019.WK1

182 NATIVE TAXA
 236 W/Adventives (shown in ALL CAPS)
 3.92 NATIVE QUALITY
 2.88 W/Adventives
 52.85 NATIVE INDEX
 44.26 W/Adventives
 -1.2 NATIVE WETNESS
 -0.4 W/Adventives
 FACULTATIVE (+)

NATIVE	NO.	%	-3	11
Tree	13	5.6	-2	3
Shrub	11	4.7	-1	9
Vine	5	2.1	0	38
Fern	1	0.4	1	38
Forb	116	49.6	2	17
Grass	17	7.3	3	13
Sedge	17	7.3	4	24
			5	42
ADVENTIVE			6	13
Tree	4	1.7	7	17
Shrub	6	2.6	8	5
Vine	1	0.4	9	1
Forb	32	13.7	10	3
Grass	11	4.7	15	1
Sedge	0	0.0	20	1

CofC	SCIENTIFIC NAME	CofW	WETNESS	COMMON NAME
0	Acalypha rhomboidea	3	FACU	THREE-SEEDED MERCURY
0	Acer negundo	-2	FACW-	BOX ELDER
0	Acer saccharinum	-3	FACW	SILVER MAPLE
1	ACHILLEA MILLEFOLIUM	3	FACU	YARROW
0	Acnida altissima	-5	OBL	WATER HEMP
2	Agrimonia gryposepala	2	FACU+	TALL AGRIMONY
-2	AGROPYRON REPENS	3	FACU	QUACK GRASS
1	AGROSTIS ALBA	-3	FACW	REDTOP
-3	ALLIARIA OFFICINALIS	0	FAC	GARLIC MUSTARD
0	AMARANTHUS GRAECIZANS	5	UPL	CREEPING AMARANTH
0	Ambrosia artemisiifolia elatior	3	FACU	COMMON RAGWEED
0	Ambrosia trifida	-1	FAC+	GIANT RAGWEED
4	Andropogon gerardii	1	FAC-	BIG BLUESTEM GRASS
2	Anemone virginiana	5	[UPL]	TALL ANEMONE
6	Antennaria neglecta	5	UPL	CAT'S FOOT
6	Antennaria plantaginifolia	5	UPL	PUSSY TOES
6	Apios americana	-3	FACW	GROUND NUT
2	Apocynum sibiricum	-1	FAC+	INDIAN HEMP
-3	ARCTIUM LAPPA	5	UPL	GREAT BURDOCK
4	Asclepias incarnata	-5	OBL	SWAMP MILKWEED
0	Asclepias syriaca	5	UPL	COMMON MILKWEED
1	Asclepias verticillata	5	UPL	WHORLED MILKWEED
1	ASPARAGUS OFFICINALIS	3	FACU	ASPARAGUS
5	Aster ericoides	4	FACU-	HEATH ASTER
4	Aster lateriflorus	-2	FACW-	SIDE-FLOWERING ASTER
4	Aster novae-angliae	-3	FACW	NEW ENGLAND ASTER
1	Aster pilosus	4	FACU+	HAIRY ASTER
10	Aster praealtus	-5	[OBL]	WILLOW ASTER
2	Aster sagittifolius drummondii	3	[FACU]	DRUMMOND'S ASTER
3	Aster simplex	-5	[OBL]	PANICLED ASTER
5	Bidens cernua	-5	OBL	NODDING BUR MARIGOLD
1	Bidens frondosa	-3	FACW	COMMON BEGGAR'S TICKS
1	Bidens vulgata	-3	FACW	TALL BEGGAR'S TICKS
2	Boehmeria cylindrica	-5	OBL	FALSE NETTLE
-1	BRASSICA NIGRA	5	UPL	BLACK MUSTARD
-1	BROMUS INERNIS	5	UPL	HUNGARIAN BROME

3 Calamagrostis canadensis	-5 OBL	BLUE JOINT GRASS
5 Calamagrostis inexpectata brevior	-4 FACW+	BOG REED GRASS
7 Carex annectens xanthocarpa	-3 FACW	FALSE FOX SEDGE
20 Carex atherodes	-5 OBL	HAIRY LAKE SEDGE
5 Carex comosa	-5 OBL	BRISTLY SEDGE
4 Carex cristatella	-4 FACW+	ROSETTE SEDGE
10 Carex lacustris	-5 OBL	LAKE SEDGE
4 Carex lanuginosa	-5 OBL	WOOLLY SEDGE
1 Carex blanda	0 FAC	WOOD SEDGE
5 Carex stricta	-5 OBL	MEADOW SEDGE
8 Carex suberecta	-5 OBL	POINTED FEN SEDGE
10 Carex trichocarpa	-5 OBL	HAIRY-FRUITED SEDGE
8 Chelone glabra	-5 OBL	TURTLEHEAD
1 CHENOPODIUM ALBUM	1 FAC-	LAMB'S QUARTERS
1 CHRYSANTHEMUM LEUCANTHEMUM PINNATIFIDUM	5 UPL	OX-EYE DAISY
1 CICHORIUM INTYBUS	5 UPL	CHICORY
6 Cicutula maculata	-5 OBL	WATER HEMLOCK
0 Circaea quadrisulcata canadensis	3 FACU	ENCHANTER'S NIGHTSHADE
2 Cirsium discolor	5 UPL	PASTURE THISTLE
-3 CIRSIIUM VULGARE	4 FACU-	BULL THISTLE
7 Comandra richardsoniana	3 FACU	FALSE TOADFLAX
-3 CONVALLARIA MAJALIS	5 UPL	LILY-OF-THE-VALLEY
1 Convolvulus sepium	0 FAC	HEDGE BINDWEED
5 Coreopsis tripteris	0 FAC	TALL COREOPSIS
5 Cornus obliqua	-5 [OBL]	PALE DOGWOOD
1 Cornus racemosa	-2 FACW-	GRAY DOGWOOD
6 Cornus stolonifera	-3 FACW	RED-OSTER DOGWOOD
3 Cyperus erythrorhizos	-5 OBL	RED-ROOTED SEDGE
1 Cyperus strigosus	-3 FACW	COMMON SHORELINE SEDGE
1 DAUCUS CAROTA	5 UPL	WILD CARROT
0 DIGITARIA ISCHAEMUM	3 FACU	SMOOTH CRAB GRASS
0 Echinochloa crusgalli	-3 FACW	BARNYARD GRASS
0 ELAEAGNUS UMBELLATA	5 UPL	AUTUMN OLIVE
8 Eleocharis intermedia	-5 [OBL]	MATTED SPIKE RUSH
3 Epilobium coloratum	-5 OBL	CINNAMON WILLOW HERB
8 Epilobium leptophyllum	-5 OBL	FEN WILLOW HERB
0 Equisetum arvense	0 FAC	HORSETAIL
7 Eragrostis frankii	-3 FACW	SANDBAR LOVE GRASS
5 Eragrostis hypnoides	-5 OBL	CREeping LOVE GRASS
2 Erechtites hieracifolia	3 FACU	FIREWEED
1 Erigeron annuus	1 FAC-	ANNUAL FLEABANE
0 Erigeron canadensis	1 FAC-	HORSEWEED
3 Erigeron strigosus	1 FAC-	DAISY FLEABANE
0 Eupatorium altissimum	3 FACU	TALL BONESET
5 Eupatorium maculatum	-5 OBL	SPOTTED JOE PYE WEED
6 Eupatorium perfoliatum	-5 [OBL]	COMMON BONESET
4 Eupatorium rugosum	3 FACU	WHITE SNAKEROOT
1 Eupatorium serotinum	-1 FAC+	LATE BONESET
2 Euphorbia corollata	5 UPL	FLOWERING SPURGE
-1 EUPHORBIA MACULATA	4 FACU-	NODDING SPURGE
1 FESTUCA ELATIOR	4 FACU-	MEADOW FESCUE
1 Fragaria virginiana	1 FAC-	WILD STRAWBERRY
5 Fraxinus americana	3 FACU	WHITE ASH
7 Fraxinus pennsylvanica	-3 FACW	RED ASH

2 <i>Fraxinus pennsylvanica subintegerrima</i>	-3 FACW	GREEN ASH
5 <i>Galium obtusum</i>	-5 [OBL]	WILD MADDER
7 <i>Gentiana andrewsii</i>	-3 FACW	CLOSED GENTIAN
4 <i>Geranium maculatum</i>	3 FACU	WILD GERANIUM
7 <i>Geum aleppicum strictum</i>	-4 [FACW+]	YELLOW AVENS
0 <i>Geum canadense</i>	0 FAC	WHITE AVENS
1 <i>Geum laciniatum trichocarpum</i>	-3 FACW	ROUGH AVENS
0 <i>GLEDITSIA TRIACANTHOS</i>	0 FAC	HONEY LOCUST
4 <i>Glyceria striata</i>	-5 OBL	POWL MANNA GRASS
0 <i>Hackelia virginiana</i>	1 FAC-	STICKSEED
1 <i>HELIANTHUS ANNUUS</i>	1 FAC-	GARDEN SUNFLOWER
2 <i>Helianthus grosseserratus</i>	-2 FACW-	SAWTOOTH SUNFLOWER
-1 <i>HEMEROCALLIS FULVA</i>	5 UPL	ORANGE DAY LILY
-1 <i>HORDEUM JUBATUM</i>	-1 FAC+	SQUIRREL-TAIL GRASS
0 <i>HYPERICUM PERFORATUM</i>	5 UPL	COMMON ST. JOHN'S WORT
4 <i>Hypericum punctatum</i>	-1 FAC+	SPOTTED ST. JOHN'S WORT
5 <i>Iris virginica shrevei</i>	-5 OBL	BLUE FLAG
5 <i>Juglans nigra</i>	3 FACU	BLACK WALNUT
4 <i>Juncus dudleyi</i>	0 FAC	DUDLEY'S RUSH
2 <i>Juniperus virginiana crebra</i>	3 FACU	RED CEDAR
2 <i>Lactuca canadensis</i>	2 FACU+	WILD LETTUCE
-1 <i>LACTUCA SCARIOLA</i>	0 FAC	PRICKLY LETTUCE
8 <i>Lathyrus palustris</i>	-5 [OBL]	MARSH VETCHLING
6 <i>Lathyrus palustris myrtifolius</i>	-5 [OBL]	MARSH VETCHLING
5 <i>Leersia oryzoides</i>	-5 OBL	RICE CUT GRASS
5 <i>Lemna minor</i>	-5 OBL	SMALL DUCKWEED
-2 <i>LONICERA MAACKII</i>	5 UPL	AMUR HONEYSUCKLE
-3 <i>LONICERA X NUENDENIENSIS</i>	5 UPL	COMMON BUSH HONEYSUCKLE
-2 <i>LYCHNIS ALBA</i>	5 UPL	WHITE CAMPION
5 <i>Lycopus americanus</i>	-5 OBL	COMMON WATER HOREHOUND
6 <i>Lycopus uniflorus</i>	-5 OBL	NORTHERN BUGLE WEED
9 <i>Lysimachia quadriflora</i>	-5 OBL	NARROW-LEAVED LOOSESTRIPE
7 <i>Lythrum alatum</i>	-5 OBL	WINGED LOOSESTRIPE
1 <i>LYTHRUM SALICARIA</i>	-5 OBL	PURPLE LOOSESTRIPE
0 <i>MEDICAGO LUPULINA</i>	1 FAC-	BLACK MEDICK
-3 <i>MELILOTUS ALBA</i>	3 FACU	WHITE SWEET CLOVER
5 <i>Mentha arvensis villosa</i>	-3 FACW	WILD MINT
6 <i>Mimulus ringens</i>	-5 OBL	MONKEY FLOWER
0 <i>MIRABILIS NYCTAGINEA</i>	5 UPL	WILD FOUR O'CLOCK
4 <i>Monarda fistulosa</i>	3 FACU	WILD BERGAMOT
-1 <i>MORUS ALBA</i>	0 FAC	WHITE MULBERRY
5 <i>Muhlenbergia mexicana</i>	-3 FACW	LEAFY SATIN GRASS
1 <i>Oenothera biennis</i>	3 FACU	COMMON EVENING PRIMROSE
0 <i>Oxalis europaea</i>	3 FACU	TALL WOOD SORREL
7 <i>Oxypolis rigidior</i>	-5 OBL	COWBANE
1 <i>Panicum capillare</i>	0 FAC	OLD WITCH GRASS
0 <i>Panicum dichotomiflorum</i>	-2 FACW-	KNEE GRASS
3 <i>Panicum implicatum</i>	0 FAC	COMMON WOOLY PANIC GRASS
7 <i>Panicum oligosanthos scribnerianum</i>	3 FACU	SCRIBNER'S PANIC GRASS
5 <i>Panicum virgatum</i>	-1 FAC+	SWITCH GRASS
1 <i>Parthenocissus inserta</i>	3 FACU	THICKET CREEPER
-3 <i>PASTINACA SATIVA</i>	5 UPL	WILD PARSNIP
7 <i>Pedicularis lanceolata</i>	-4 FACW+	SWAMP BETONY
5 <i>Penthorum sedoides</i>	-5 OBL	DITCH STONECROP

0 Phalaris arundinacea	-4 FACW+	REED CANARY GRASS
1 PHLEUM PRATENSE	3 FACU	TIMOTHY
7 Phlox glaberrima interior	-3 FACW	MARSH PHLOX
3 Physalis heterophylla	5 UPL	CLAMMY GROUND CHERRY
1 PLANTAGO LANCEOLATA	0 FAC	ENGLISH PLANTAIN
0 PLANTAGO MAJOR	-1 FAC+	COMMON PLANTAIN
0 Plantago rugelii	0 FAC	RED-STALKED PLANTAIN
0 POA COMPRESSA	2 FACU+	CANADA BLUE GRASS
0 POA PRATENSIS	1 FAC-	KENTUCKY BLUE GRASS
5 Polygonum amphibium stipulaceum	-5 OBL	WATER KNOTWEED
5 Polygonum coccineum	-5 OBL	WATER HEARTSEASE
7 Polygonum hydropiperoides	-5 OBL	WILD WATER PEPPER
0 Polygonum lapathifolium	-4 FACW+	HEARTSEASE
0 Polygonum pensylvanicum laevigatum	-4 FACW+	PENNSYLVANIA KNOTWEED
0 POLYGONUM PERSICARIA	-3 FACW	LADY'S THUMB
6 Polygonum punctatum	-5 OBL	SMARTWEED
2 Polygonum scandens	0 FAC	CLIMBING FALSE BUCKWHEAT
2 Populus deltoides	-1 FAC+	COTTONWOOD POPLAR
0 Potentilla norvegica	0 FAC	NORWAY CINQUEFOIL
0 Prunella vulgaris lanceolata	0 FAC	SELF HEAL
1 Prunus serotina	3 FACU	WILD BLACK CHERRY
5 Pycnanthemum virginianum	-4 FACW+	COMMON MOUNTAIN MINT
2 Pyrus ioensis	5 UPL	IOWA CRAB
4 Ratibida pinnata	5 UPL	YELLOW CONEFLOWER
-3 RHAMNUS CATHARTICA	3 FACU	COMMON BUCKTHORN
-3 RHAMNUS FRANGULA	-1 FAC+	GLOSSY BUCKTHORN
1 Rhus glabra	5 UPL	SMOOTH SUMAC
1 Rhus radicans	3 [FACU]	POISON IVY
3 Rhus typhina	5 UPL	STAGHORN SUMAC
5 Rorippa islandica fernaldiana	-5 OBL	MARSH CRESS
5 Rosa carolina	4 FACU-	PASTURE ROSE
-3 ROSA MULTIFLORA	3 FACU	MULTIFLORA ROSE
7 Rosa setigera	2 FACU+	ILLINOIS ROSE
3 Rubus allegheniensis	2 FACU+	COMMON BLACKBERRY
2 Rubus occidentalis	5 UPL	BLACK RASPBERRY
1 Rudbeckia hirta	3 FACU	BLACK-EYED SUSAN
3 Rudbeckia triloba	1 FAC-	BROWN-EYED SUSAN
7 Rumex orbiculatus	-5 OBL	GREAT WATER DOCK
4 Sagittaria latifolia	-5 OBL	COMMON ARROWHEAD
0 SALIX FRAGILIS	-1 FAC+	CRACK WILLOW
1 Salix interior	-5 OBL	SANDBAR WILLOW
5 Salix rigida	-4 FACW+	HEART-LEAVED WILLOW
1 Sambucus canadensis	4 FACW-	ELDERBERRY
4 Scirpus atrovirens	-5 OBL	DARK GREEN RUSH
6 Scirpus fluviatilis	-5 OBL	RIVER BULRUSH
4 Scirpus lineatus	-5 OBL	RED BULRUSH
5 Scirpus validus creber	-5 OBL	GREAT BULRUSH
5 Scutellaria epilobiifolia	-5 OBL	MARSH SKULLCAP
5 Scutellaria lateriflora	-5 OBL	MAD-DOG SKULLCAP
-1 SETARIA FABERII	2 FACU+	GIANT FOXTAIL
5 Silphium integrifolium	5 UPL	ROSIN WEED
5 Silphium terebinthinaceum	1 [FAC-]	PRAIRIE DOCK
7 Sium suave	-5 OBL	WATER PARSNIP
5 Smilacina stellata	1 FAC-	STARRY FALSE SOLOMON'S SEAL

4 Smilax lasioneura	5 UPL	COMMON CARRION FLOWER
-3 SOLANUM DULCAMARA	0 FAC	BITTERSWEET NIGHTSHADE
1 Solidago altissima	3 FACU	TALL GOLDENROD
4 Solidago graminifolia media	-2 [FACW-]	GRASS-LEAVED GOLDENROD
3 Solidago graminifolia nuttallii	-2 FACW-	GRASS-LEAVED GOLDENROD
5 Solidago juncea	5 UPL	EARLY GOLDENROD
4 Solidago nemoralis	5 UPL	OLD-FIELD GOLDENROD
4 Solidago rigida	4 FACU-	STIFF GOLDENROD
0 SONCHUS OLERACEUS	3 FACU	STORE-FRONT SOW THISTLE
6 Sparganium eurycarpum	-5 OBL	COMMON BUR REED
5 Spartina pectinata	-4 FACW+	PRAIRIE CORD GRASS
4 Sphegnopholis intermedia	0 FAC	SLENDER WEDGE GRASS
1 SPOROBOLUS ASPER	5 UPL	ROUGH DROPSEED
5 Stachys palustris homotricha	-5 OBL	WOUNDWORT
5 Stachys tenuifolia hispida	-5 [OBL]	ROUGH HEDGE NETTLE
0 TARAXACUM OFFICINALE	3 FACU	COMMON DANDELION
3 Teucrium canadense	-2 FACW-	WOOD SAGE
5 Thalictrum revolutum	0 FAC	WAXY MEADOW RUE
1 TRAGOPOGON PRATENSIS	5 UPL	COMMON GOAT'S BEARD
1 TRIFOLIUM PRATENSE	2 FACU+	RED CLOVER
0 TYPHA ANGUSTIFOLIA	-5 OBL	NARROW-LEAVED CAT-TAIL
1 Typha latifolia	-5 OBL	BROAD-LEAVED CAT-TAIL
4 Ulmus rubra	0 FAC	SLIPPERY ELM
2 Urtica procera	-1 FAC+	TALL NETTLE
4 Verbena hastata	-4 FACW+	BLUE VERVAIN
5 Verbena urticifolia	-1 FAC+	WHITE VERVAIN
5 Vernonia altissima	0 FAC	TALL IRONWEED
5 Vernonia missurica	-1 FAC+	MISSOURI IRONWEED
6 Veronicastrum virginicum	0 FAC	CULVER'S ROOT
0 VIBURNUM DENTATUM	0 FAC	ARROW-WOOD
5 Viburnum rafinesquianum	5 UPL	DOWNY ARROW-WOOD
7 Vicia americana	5 [UPL]	AMERICAN VETCH
3 Viola sororia	1 FAC-	HAIRY WOOD VIOLET
4 Vitis riparia	-2 FACW-	RIVERBANK GRAPE
7 Wolffia columbiana	-5 OBL	COMMON WATER MEAL
15 Wolffia punctata	-5 OBL	DOTTED WATER MEAL
-1 XANTHIUM STRUMARIUM	0 FAC	COCKLEBUR
5 Viola species		VIOLET SPECIES