



**2004 – 2005  
CAPITAL IMPROVEMENT PLAN  
Adopted October 6, 2003**

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## **SECTION I -- INTRODUCTION**

The North Harris County Regional Water Authority (NHCRWA), which was created by the Texas Legislature, began operation in 2000. Its enabling legislation directed the NHCRWA to perform a variety of duties, all of which center around it fulfilling its role as a wholesale water supplier. Providing an alternate water supply to reduce the dependence on groundwater as directed by the Harris-Galveston Coastal Subsidence District (HGCSA) is a major component of successfully fulfilling that role.

The NHCRWA's approved Groundwater Reduction Plan (GRP) generally defines how it will comply with the HGCSA groundwater reduction requirements through the year 2030. Furthermore, those requirements mandate that by 2005 construction shall begin on the infrastructure required to meet the 2010 conversion target of 30 percent reduction in groundwater use.

While the NHCRWA is committed to the successful and timely conversion to surface water, it has some even more immediate concerns. Several of its member districts will need additional water prior to the 2010 conversion to surface water, and the NHCRWA has committed to embark on a program called the Groundwater Transfer Program (GTP) to address that need. Simply put, it involves the use of groundwater from districts with excess capacity by districts that need additional water. Components of the 2010 Water Distribution and Transmission System (2010 System) will be used to transmit the water. The implementation of the GTP will allow the resolution of a real water supply problem in the most cost-effective manner.

In addition to the implementation of the GTP, the NHCRWA will move forward with the definition of the alignment and purchase of the easements required for the remainder of the 2010 System, installation of a Central Control System, and implementation of a pilot project on water reuse. To effectively implement these various programs requires the definition of the facilities needed, their estimated cost and a timetable. This 2004-2005 Capital Improvement Plan will serve as the definition tool to facilitate that implementation.

## SECTION II – THE PLAN

This Capital Improvement Plan (CIP) will serve as the initial road map for implementation of the GTP and other capital-related activities over the next 2 years. It defines the program elements, estimated costs, and relative timetables.

The CIP addresses the following key areas:

- GTP projects and related system improvements
- Definition of alignment and purchase of required easements for the remainder of the 2010 Distribution System
- Definition of alignment and purchase of required easements for the 2010 Transmission System
- Central Control System
- Water reuse

Details on the specific projects are presented in *Appendix B*.

CIPs are typically updates, which are based on an array of prior program and project experience. However, this is the initial NHCRWA CIP. As such, the following points are offered so that the implementation of this CIP may be kept in perspective:

- Some key components of the GTP, i.e. buy/sell agreements, are still in development and that may affect the final projects' definition.
- Project definitions and estimated costs have been based on very preliminary data available at this time. As the projects proceed further in the design, they will be better defined.
- Real estate and construction costs can be and are influenced by variables over which the NHCRWA has no control. As acquisition is completed on the initial projects and construction bids are received, project costs can be better refined.
- It is not uncommon – in fact, it is common to experience unexpected costs in the implementation of a CIP. A contingency mechanism is the most practical way to address this issue.

As seen in the following table, the estimated cost of the Authority's 2004-2005 CIP is approximately \$118.5 million. The majority of the program will be funded by proceeds from the sale of the NHCRWA Series 2003 Senior Lien Revenue Bonds. \$20 million in Bond Anticipation Notes (BAN) is proposed to fund projects not included in the bond sale, i.e. accelerated purchase of easements for the remainder of the 2010 Water Distribution and Transmission System. An additional \$11.587 million of funding will be needed in 2005 from a source to be defined, i.e. bonds, BANs, etc. These funds will be needed primarily to complete the accelerated purchase of easements for the 2010 Transmission System.

## SUMMARY OF 2004-2005 CAPITAL IMPROVEMENT PROGRAM

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition	\$ 2,048	\$ 1,351	\$ 6,097	\$ 11,456	\$ 20,952
Design	3,536	8,963	4,889	1,560	18,948
Construction		1,324	71,688	94	73,106
Equipment					0
Other			5,531		5,531
<b>Total Authorizations</b>	<b>\$ 5,584</b>	<b>\$ 11,638</b>	<b>\$ 88,205</b>	<b>\$ 13,110</b>	<b>\$ 118,537</b>
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	\$ 5,564	\$ 8,474	\$ 71,389	1,523	\$ 86,950
Bond Anticipation Notes	20	3,164	16,816		20,000
To Be Defined				11,587	11,587
<b>Total Funds</b>	<b>\$ 5,584</b>	<b>\$ 11,638</b>	<b>88,205</b>	<b>13,110</b>	<b>\$ 118,537</b>

- Note:
1. Funding through September 2003 shown as Series 2003 Revenue Bonds was initially authorized/paid from operating funds and will be reimbursed from bond proceeds.
  2. Funding shown in 2003, as Bond Anticipation Notes (BAN), will initially be authorized from operating funds and will be reimbursed by proceeds from the BAN.

## APPENDIX A

### GLOSSARY OF TERMS

Acquisition	Includes the cost to purchase land and easements and the acquisition services (i.e. ROW Services, appraisals, legal, etc.) required to accomplish the purchase
Authorization	Amount designated for the performance of work or service
Design	Includes the cost for the planning and design services and design management
Construction	Includes the cost of the construction contract, contingencies, construction management, construction observation and materials testing
Equipment	Includes the cost of any equipment that the may be purchased separately from the construction contract
FWSD	Fresh Water Supply District
MUD	Municipal Utility District
N/A	Not Applicable
Other	A general category that may be used to pay acquisition, design, construction, equipment or any other relevant costs
PUD	Public Utility District
UD	Utility District
VAR	Various districts or key map locations as applicable
WCID	Water Control Improvement District

**APPENDIX B ~ FORMS – PDFs TO FOLLOW**  
**CIP FORM – CIP1A-100**  
**CIP FORM – CIP 200**

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> Bammel – North Houston Distribution Line	<b>District:</b> 3 and 4	<b>C.I.P. Number:</b> 1a
		<b>Key Map:</b> 331W, 331X, 371A, 371E, 371J
<b>Description:</b> Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Bammel UD, Fountainhead MUD, Harris County MUD 16, Harris County MUD 202, Northwest Harris County MUD 21, Northwest Harris County MUD 22, and Northwest Harris County MUD 23.		

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition	564				564
Design	895				895
Construction			8,837		8,837
Equipment					0
Other					0
<b>Total Authorizations</b>	1,459	0	8,837	0	10,296
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	1,459		8,837		10,296
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	1,459	0	8,837	0	10,296

<b>Project:</b> Champion Forest Distribution Line	<b>District:</b> 2 and 3	<b>C.I.P. Number:</b> 1b
		<b>Key Map:</b> 330Z, 371A, 371E
<b>Description:</b> Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Harris County MUD 48, Harris County WCID 109, Harris County WCID 116, and Heatherloch MUD.		

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition	520				520
Design	517				517
Construction			4,595		4,595
Equipment					0
Other					0
<b>Total Authorizations</b>	1,037	0	4,595	0	5,632
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	1,037		4,595		5,632
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	1,037	0	4,595	0	5,632

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> BMMEL – NORTH HOUSTON SUPPLY LINE	<b>District:</b> 3	<b>C.I.P. Number:</b> 1c
		<b>Key Map:</b> 371J, 371N

**Description:** Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Northwest Harris County MUD 24.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition	217		286		503
Design	285	328			613
Construction		1,324	1,483		2,807
Equipment					0
Other					0
<b>Total Authorizations</b>	502	1,652	1,769	0	3,923
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	502	1,324			1,826
Bond Anticipation Notes		328	1,769		2,097
To Be Defined					0
<b>Total Funds</b>	502	1,652	1,769	0	3,923

<b>Project:</b> T. C. JESTER REGIONAL PUMP STATION	<b>District:</b> N/A	<b>C.I.P. Number:</b> 2
		<b>Key Map:</b> 331Y

**Description:** Project provides for the design, real estate acquisition and construction of the initial phase of the storage, pumping and related appurtenances at the regional pump station facility.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition		410			410
Design		421			421
Construction			3,668		3,668
Equipment					0
Other					0
<b>Total Authorizations</b>	0	831	3,668	0	4,499
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		831	3,668		4,499
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	831	3,668	0	4,499

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> SUPPLEMENTAL WELLS	<b>District:</b> VAR	<b>C.I.P. Number:</b> 3
		<b>Key Map:</b> 329V

**Description:** Project provides for the acquisition of well sites and design and construction of wells and appurtenances. The wells will be constructed as needed to augment supplies of water from Seller districts during the Groundwater Transfer Program with the intent that they will in time become part of the regional well inventory of the Authority when the conversion to surface water begins.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition		110	110		220
Design		290			290
Construction			2,446		2,446
Equipment					0
Other					0
<b>Total Authorizations</b>	0	400	2,556	0	2,956
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		400	2,556		2,956
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	400	2,556	0	2,956

<b>Project:</b> CUTTEN DISTRIBUTION LINE PHASE 1	<b>District:</b> 2	<b>C.I.P. Number:</b> 4
		<b>Key Map:</b> 329V, 329Z, 330W, 370A, 370E

**Description:** This project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Cy-Champ PUD, Cypress Forest PUD, Harris County FWSD 52, Harris County MUD 191, and Prestonwood Forest UD.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition	397				397
Design	720				720
Construction			6,965		6,965
Equipment					0
Other					0
<b>Total Authorizations</b>	1,117	0	6,965	0	8,082
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	1,117		6,965		8,082
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	1,117	0	6,965	0	8,082

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> LOUETTA REGIONAL WATER PLANT	<b>District:</b> 2	<b>C.I.P. Number:</b> 5
		<b>Key Map:</b> 329V

**Description:** Project provides for the site acquisition, design and construction of the initial phase of the storage, disinfection, pumping and related appurtenances at the regional water plant facility.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition		410			410
Design	32	389			421
Construction			3,668		3,668
Equipment					0
Other					0
<b>Total Authorizations</b>	32	799	3,668	0	4,499
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	32	799	3,668		4,499
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	32	799	3,668	0	4,499

<b>Project:</b> LOUETTA DISTRIBUTION LINE, PHASE 1	<b>District:</b> 1 and 2	<b>C.I.P. Number:</b> 6
		<b>Key Map:</b> 329T, 329U, 329V

**Description:** Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Charterwood MUD, Harris County MUD 286 and Malcomson Road UD.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition	350				350
Design	715				715
Construction			7,309		7,309
Equipment					0
Other					0
<b>Total Authorizations</b>	1,065	0	7,309	0	8,374
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	1,065		7,309		8,374
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	1,065	0	7,309	0	8,374

**2004 – 2005  
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**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> OLD LOUETTA DISTRIBUTION LINE	<b>District:</b> 2	<b>C.I.P. Number:</b> 6a
		<b>Key Map:</b> 329R, 329V

**Description:** Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Harris County WCID 119 and Louetta North PUD.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition		301			301
Design		529			529
Construction			3,524		3,524
Equipment					0
Other					0
<b>Total Authorizations</b>	0	830	3,524	0	4,354
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		830	3,524		4,354
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	830	3,524	0	4,354

<b>Project:</b> LOUETTA DISTRIBUTION LINE, PHASE 2	<b>District:</b> 1	<b>C.I.P. Number:</b> 6b
		<b>Key Map:</b> 328T, 328U, 328V, 329S, 329T

**Description:** Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Faulkey Gully MUD, Grant Road PUD, Harris County MUD 18 and Northwest Harris County MUD 5.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			577		577
Design		790			790
Construction			4,826		4,826
Equipment					0
Other					0
<b>Total Authorizations</b>	0	790	5,403	0	6,193
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		790	5,403		6,193
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	790	5,403	0	6,193

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> ELLA DISTRIBUTION LINE	<b>District:</b> 4	<b>C.I.P. Number:</b> 7a
		<b>Key Map:</b> 291W, 331G, 331H, 331M

**Description:** Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Harris County WCID 91, Harris County WCID 132 and Westador MUD.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			515		515
Design		817			817
Construction			4,589		4,589
Equipment					0
Other					0
<b>Total Authorizations</b>	0	817	5,104	0	5,921
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		817	5,104		5,921
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	817	5,104	0	5,921

<b>Project:</b> ELLA/KUYKENDAHL DISTRIBUTION LINE	<b>District:</b> 4 and 5	<b>C.I.P. Number:</b> 7b
		<b>Key Map:</b> 331A, 331B, 331C, 331F, 331G

**Description:** Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Bridgestone MUD, Cypresswood UD, Harris County MUD 275, Klein PUD and Northwest Harris County MUD 36.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			504		504
Design		1,029			1,029
Construction			8,197		8,197
Equipment					0
Other					0
<b>Total Authorizations</b>	0	1,029	8,701	0	9,730
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		1,029	8,701		9,730
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	1,029	8,701	0	9,730

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> LOUETTA DISTRIBUTION LINE, PHASE 3	<b>District:</b> 4	<b>C.I.P. Number:</b> 7c
		<b>Key Map:</b> 330H, 330K, 330L, 330M, 330P, 331E
<b>Description:</b> Project provides for the design, real estate acquisition and construction of a distribution line, which is a component of the 2010 Water Distribution and Transmission System and the Groundwater Transfer Program. The project will eventually serve Bilma PUD, Harris County MUD 24, Kleinwood MUD, Louetta Road UD, Spring Creek Forest PUD and Terranova West MUD.		

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			523		523
Design		820			820
Construction			5,526		5,526
Equipment					0
Other					0
<b>Total Authorizations</b>	0	820	6,049	0	6,869
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		820	6,049		6,869
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	820	6,049	0	6,869

<b>Project:</b> T. C. JESTER DISTRIBUTION LINE	<b>District:</b> 4	<b>C.I.P. Number:</b> 10
		<b>Key Map:</b> 331E, 331J, 331N, 331P, 331T
<b>Description:</b> Project provides for the engineering design required to evaluate project alignment alternatives and determine the final project alignment and the support services to acquire the necessary real estate for a distribution line, which is a component of the 2010 Water Distribution and Transmission System. The project will eventually directly serve Cypress-Klein UD, Harris County MUD 44, Harris County MUD 316, and Northwest Harris County MUD 20.		

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			770		770
Design		511			511
Construction					0
Equipment					0
Other					0
<b>Total Authorizations</b>	0	511	770	0	1,281
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes		511	770		1,281
To Be Defined					0
<b>Total Funds</b>	0	511	770	0	1,281

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> T.C. JESTER/ELLA DISTRIBUTION LINE	<b>District:</b> 4	<b>C.I.P. Number:</b> 11
		<b>Key Map:</b> 331L, 331M, 331O, 331T

**Description:** This project provides for the engineering design required to evaluate project alignment alternatives and determine the final project alignment and the acquisition services to acquire the necessary real estate for a distribution line, which is a component of the 2010 Water Distribution and Transmission System. The project will eventually directly serve Bammel Forest Utility Company, Harris County MUD 211, Harris County MUD 233 and Ponderosa Forest UD.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			711		711
Design		403			403
Construction					0
Equipment					0
Other					0
<b>Total Authorizations</b>	0	403	711	0	1,114
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes		403	711		1,114
To Be Defined					0
<b>Total Funds</b>	0	403	711	0	1,114

<b>Project:</b> CYPRESSWOOD DISTRIBUTION LINE	<b>District:</b> 4 and 5	<b>C.I.P. Number:</b> 14
		<b>Key Map:</b> 331D, 331G, 331H, 332A, 332J

**Description:** This project provides for the engineering design required to evaluate project alignment alternatives and determine the final project alignment and the acquisition services to acquire the necessary real estate for a distribution line, which is a component of the 2010 Water Distribution and Transmission System. The project will eventually directly serve Candlelight Service Company, CNP UD, Harris County MUD 104 and Harris County WCID 110.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			641		641
Design		377			377
Construction					0
Equipment					0
Other					0
<b>Total Authorizations</b>	0	377	641	0	1,018
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes		377	641		1,018
To Be Defined					0
<b>Total Funds</b>	0	377	641	0	1,018

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> BOURGEOIS DISTRIBUTION LINE	<b>District:</b> 2, 3, and 4	<b>C.I.P. Number:</b> 15
		<b>Key Map:</b> 330P, 330S, 370M, 370N, 370Q, 371J

**Description:** Project provides for the engineering design required to evaluate project alignment alternatives and determine the final project alignment and the acquisition services to acquire the necessary real estate for a distribution line, which is a component of the 2010 Water Distribution and Transmission System. The project will eventually directly serve AquaSource, Cypress Forest PUD, Harris County WCID 114 and Northwest Harris County MUD 6.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			807		807
Design		489			489
Construction					0
Equipment					0
Other					0
<b>Total Authorizations</b>	0	489	807	0	1,296
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes		489	807		1,296
To Be Defined					0
<b>Total Funds</b>	0	489	807	0	1,296

<b>Project:</b> CUTTEN DISTRIBUTION LINE PHASE 2	<b>District:</b> 2 and 3	<b>C.I.P. Number:</b> 16
		<b>Key Map:</b> 370F, 370K, 370L, 370Q

**Description:** This project provides for the engineering design required to evaluate project alignment alternatives and determine the final project alignment and the acquisition services to acquire the necessary real estate for a distribution line, which is a component of the 2010 Water Distribution and Transmission System.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition			653		653
Design		455			455
Construction					0
Equipment					0
Other					0
<b>Total Authorizations</b>	0	455	653	0	1,108
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes		455	653		1,108
To Be Defined					0
<b>Total Funds</b>	0	455	653	0	1,108

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> 2010 TRANSMISSION LINE	<b>District:</b> N/A	<b>C.I.P. Number:</b> 17
		<b>Key Map:</b> 370U, 370V, 371S

**Description:** Project provides for the engineering design required to evaluate project alignment alternatives and determine the final project alignment and the support services to acquire the necessary real estate for the transmission line which will deliver water from the City of Houston take point (approximately east of U.S. Hwy 59 and Beltway 8) to the proposed T.C. Jester Pump Station. This transmission line is a component of the 2010 Water Distribution and Transmission System. It is the sole surface water supply line to the Authority to meet the 2010 to 2019 surface water needs of the Authority.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition				11,456	11,456
Design			3,012		3,012
Construction					0
Equipment					0
Other					0
<b>Total Authorizations</b>	0	0	3,012	11,456	14,468
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes			3,012		3,012
To Be Defined				11,456	11,456
<b>Total Funds</b>	0	0	3,012	0	14,468

<b>Project:</b> SYSTEM IMPROVEMENTS	<b>District:</b> VAR	<b>C.I.P. Number:</b> 100
		<b>Key Map:</b> VAR

**Description:** Project provides design, real estate acquisition and construction for interim improvements to existing district systems and supplemental additions to facilitate the efficient operation of the Groundwater Transfer Program.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition		120			120
Design	38	584	94		716
Construction			2,587	94	2,681
Equipment					0
Other					0
<b>Total Authorizations</b>	38	704	2,681	94	3,517
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	38	153	732	94	1,017
Bond Anticipation Notes		551	1,949		2,500
To Be Defined					0
<b>Total Funds</b>	38	704	2,681	94	3,517

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> CENTRAL CONTROL SYSTEM	<b>District:</b> VAR	<b>C.I.P. Number:</b> 101
		<b>Key Map:</b> VAR
<b>Description:</b> Project provides the design and construction required to install the initial phase of the Supervisory Control and Data Acquisition (SCADA) System to facilitate the operation of the Groundwater Transfer Program		

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition					0
Design		581			0
Construction			2,627		581
Equipment					2,627
Other					0
<b>Total Authorizations</b>	0	581	2,627	0	3,208
<b>Source of Funds</b>					
Series 2003 Revenue Bonds		581	2,627		3,208
Bond Anticipation Notes					0
To Be Defined					0
<b>Total Funds</b>	0	581	2,627	0	3,208

<b>Project:</b> WATER REUSE	<b>District:</b> VAR	<b>C.I.P. Number:</b> 102
		<b>Key Map:</b> VAR
<b>Description:</b> Project provides engineering and other services to support the Authority's Water Reuse efforts and an allowance to participate in a pilot water reuse project.		

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition					0
Design	20	50	50		120
Construction			841		841
Equipment					0
Other					0
<b>Total Authorizations</b>	20	50	891	0	961
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes	20	50	891		961
To Be Defined					0
<b>Total Funds</b>	20	50	891	0	961

**2004 – 2005  
CAPITAL IMPROVEMENT PLAN**

**NORTH HARRIS COUNTY  
REGIONAL WATER AUTHORITY**

<b>Project:</b> SUPPORT AND SPECIALTY	<b>District:</b> VAR	<b>C.I.P. Number:</b> 200
		<b>Key Map:</b> VAR

**Description:** Provides various support and specialty professional services such as program management, control surveying, well location assessments, corrosion protection analysis, surge analysis, and pricing policy/model updates.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition					0
Design	314	100	1,733	1,560	3,707
Construction					0
Equipment					0
Other					0
<b>Total Authorizations</b>	314	100	1,733	1,560	3,707
<b>Source of Funds</b>					
Series 2003 Revenue Bonds	314	100	1,651	1,429	3,494
Bond Anticipation Notes			82		82
To Be Defined				131	131
<b>Total Funds</b>	314	100	1,733	1,560	3,707

<b>Project:</b> CONTINGENCY	<b>District:</b> VAR	<b>C.I.P. Number:</b> N/A
		<b>Key Map:</b> VAR

**Description:** Provides funding for costs in excess of original program estimates and unexpected necessary expenses such as those to facilitate escalation of program components, to facilitate system operation and to enable payment of exceptional real estate judgments.

Project Authorizations	Authorizations (Thousands)		Fiscal Year Planned Authorizations (Thousands)		Project Total
	1/1/03-9/30/03	10/1/03-12/31/03	2004	2005	
Acquisition					0
Design					0
Construction					0
Equipment					0
Other			5,531		5,531
<b>Total Authorizations</b>	0	0	5,531	0	5,531
<b>Source of Funds</b>					
Series 2003 Revenue Bonds					0
Bond Anticipation Notes			5,531		5,531
To Be Defined					0
<b>Total Funds</b>	0	0	5,531	0	5,531