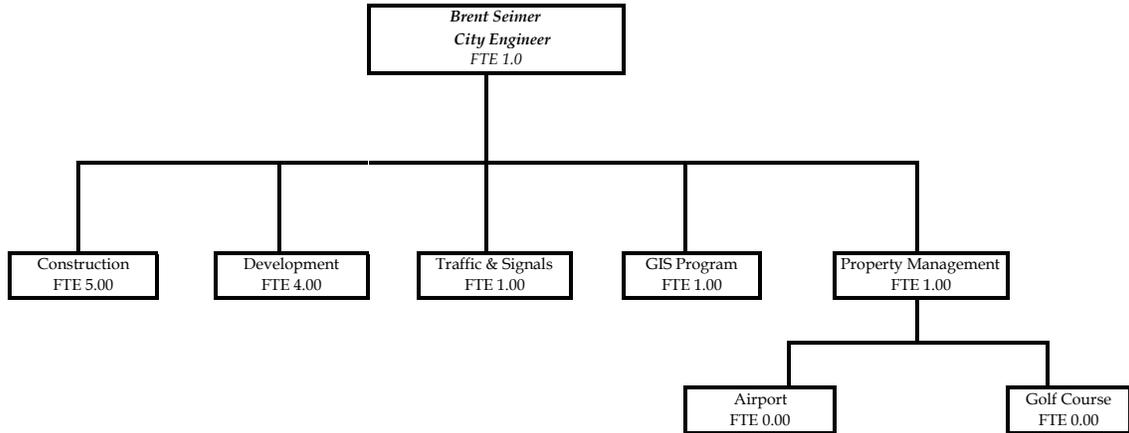


# ENGINEERING DEPARTMENT

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**Mission:**

*Provide professional civil engineering and management support for the effective and efficient operation, maintenance and improvement*

# Department Summary

# Engineering



## DEPARTMENT DESCRIPTION:

The Engineering Department is responsible for the operation and capital improvement of the community's infrastructure. Public and safety needs are met by the Traffic/Signals programs. Planning, programming, design and construction services are provided to these and many other City departments and programs by the Development, Construction, Property Management, including Golf Course and Geographical Information System (GIS) programs.

|                                 | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Budget</u> | <u>2006-07<br/>Estimated</u> | <u>2007-08<br/>Budget</u> |
|---------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|
| <b>EXPENDITURES BY PROGRAM:</b> |                           |                           |                              |                           |
| Engineering-Construction        | \$339,862                 | \$426,826                 | \$414,663                    | \$466,026                 |
| Engineering-Development         | 345,433                   | 371,634                   | 395,445                      | 385,701                   |
| Traffic/Signals                 | 418,088                   | 522,952                   | 473,638                      | 534,448                   |
| GIS Program                     | 91,422                    | 80,665                    | 79,533                       | 80,825                    |
| Property Management             | 58,007                    | 85,743                    | 76,127                       | 84,039                    |
| Airport                         | 14,609                    | 24,961                    | 21,909                       | 18,733                    |
| Golf Course                     | 17,066                    | 9,229                     | 9,255                        | 4,613                     |
| <b>Total</b>                    | <u>\$1,284,487</u>        | <u>\$1,522,010</u>        | <u>\$1,470,570</u>           | <u>\$1,574,385</u>        |

## EXPENDITURES BY CATEGORY:

|                       |                    |                    |                    |                    |
|-----------------------|--------------------|--------------------|--------------------|--------------------|
| Salaries and Benefits | \$837,241          | \$966,460          | \$928,614          | \$1,069,770        |
| Services and Supplies | 424,651            | 538,100            | 500,220            | 503,115            |
| Capital Outlay        | 22,595             | 17,450             | 41,736             | 1,500              |
| <b>Total</b>          | <u>\$1,284,487</u> | <u>\$1,522,010</u> | <u>\$1,470,570</u> | <u>\$1,574,385</u> |

## REVENUES BY FUND:

|                  |                    |                    |                    |                    |
|------------------|--------------------|--------------------|--------------------|--------------------|
| General Fund     | \$1,267,421        | \$1,512,781        | \$1,461,315        | \$1,569,772        |
| Golf Course Fund | 17,066             | 9,229              | 9,255              | 4,613              |
| <b>Total</b>     | <u>\$1,284,487</u> | <u>\$1,522,010</u> | <u>\$1,470,570</u> | <u>\$1,574,385</u> |

|                     | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Actual</u> | <u>2007-08<br/>Budget</u> |
|---------------------|---------------------------|---------------------------|---------------------------|
| <b>PERSONNEL:</b>   |                           |                           |                           |
| Full-time Positions | 12.00                     | 13.00                     | 13.00                     |
| <b>Total</b>        | <u>12.00</u>              | <u>13.00</u>              | <u>13.00</u>              |





**DEPARTMENT:** Engineering  
**PROGRAM:** Construction

**FUND:** General  
**ACCOUNT:** 44122

## PROGRAM GOALS:

1. Ensure the safety, reliability, environmental compliance and optimal performance of the City's water, wastewater, storm drain and road systems.
  2. Maintain expectations of the stakeholders
  3. Create a work environment that supports a talented workforce characterized by teamwork, productivity and quality.
  4. Manage the Department through superior leadership, planning and communication.
- To accomplish program goals, capital improvement projects are created and designed to meet the identified infrastructure needs. Annual maintenance projects for water, sewer, streets and storm drains are designed to fit within the adopted annual budget for each fund. For longer range capital improvements, bonds sales and/or grant funding are utilized to fund those capital improvement projects.

## PROGRAM OBJECTIVES:

- 1 a) Evaluate facilities to identify condition and efficiency of operation.
  - 1 b) Prioritize project needs based upon condition assessment.
  - 1 c) Plan and budget projects to improve those facilities to meet immediate and long range needs.
  - 1 d) Create/design projects to meet needs within budget constraints.
  - 1 e) Construct projects through public contracting process.
  - 1 f) Monitor and evaluate completed projects for operational effectiveness.
- 
- 2 a) Involve City of Eureka Public Works personnel in defining missions and goals by discussing their expectations, reviewing their records and involving them in the preparation of construction documents prior to bidding and construction
  - 2 b) Solicit input from municipal and public agencies that share the City's water, wastewater and road infrastructure facilities when considering and planning capital improvement projects.
  - 2 c) Publish future proposed project schedules and budgeted costs in the 5-Year CIP for public review and comment.
  - 2 d) Present proposed and completed projects and costs to the City Council for approval to keep them involved in the expenditure and use of City funds toward completing CIP goals.
- 
- 3 a) Provide training opportunities for staff to continue to build engineering design and management skills through attending workshops and seminars.
  - 3 b) Provide educational opportunities for staff to obtain professional engineering registration.
  - 3 c) Allow staff choices in work assignments, within the overall Department scheduling needs, to promote individual sense of ownership of projects.
  - 3 d) Develop performance measures at each organizational level that demonstrates results.
- 
- 4 a) Hold regular staff meetings to involve staff in the planning and scheduling of projects.
  - 4 b) Provide professional oversight, review and comment throughout all stages of each project.
  - 4 c) Communicate performance information to key stakeholders, the public and staff.

In addition to constructing capital improvement projects, over the last ten years the Construction Division has developed standard detail drawings and engineering design standards. The objective in the near future is to assemble these standards into a published document.

# Engineering



DEPARTMENT: Engineering  
 PROGRAM: Construction  
 FUND: General  
 ACCOUNT: 44122

**PERFORMANCE MEASURES:**

| Program/Service Outcomes: (based on program objectives)                                       | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Estimated</u> | <u>2007-08<br/>Budget</u> |
|---|---------------------------|------------------------------|---------------------------|
| Develop standard detail drawings and engineering design standards                             | Yes                       | Yes                          | Yes                       |
| Incorporate standard detail drawings and engineering design standards into published document | No                        | No                           | Yes                       |
| Implement document archival process   | No                        | No                           | Yes                       |

**Program/Service Outputs: (goods, services, units produced)**

|   |      |      |      |
|---|------|------|------|
| Capital Improvement Projects completed (\$0-\$50,000)       | 2    | 1    | 1    |
| Capital Improvement Projects completed (\$50,000-\$500,000) | 5    | 8    | 11   |
| Capital Improvement Projects completed (>\$500,000)         | 5    | 3    | 1    |
| Capital Improvement Projects designed                       | 12   | 17   | 19   |
| Evaluate Water Transmission System                          | 100% | 100% | 100% |
| Evaluate Water Distribution System                          | 10%  | 75%  | 100% |
| Evaluate Water Storage System                               | 100% | 100% | 100% |
| Evaluate Wastewater Collection System                       | 20%  | 50%  | 100% |
| Evaluate Wastewater Lift Stations                           | 90%  | 90%  | 100% |
| Evaluate Wastewater Treatment                               | 25%  | 50%  | 95%  |
| Assess Roadway Pavement Condition                           | 75%  | 100% | 100% |
| Evaluate Stormdrain System                                  | 25%  | 25%  | 50%  |
| Publish Project Management Manual                           | 25%  | 50%  | 100% |
| Develop Document Archival System                            | 5%   | 10%  | 33%  |

# Engineering



DEPARTMENT: Engineering  
 PROGRAM: Development  
 FUND: General  
 ACCOUNT: 44124

**PROGRAM DESCRIPTION:**

The Engineering Development Program is responsible for the administration of all engineering related responsibilities and employees; development and implementation of the City long-range capital improvement program; and review and coordination of all development related issues as they pertain to City infrastructure.

The Division manages all development related Customer Service Request issues, including issuing water, sewer, encroachment, transportation and fire hydrant permits and performing inspections for all required public improvements within City rights-of-way. Development also reviews use permits, street vacations, project referrals, lot-line adjustments, parcel maps, subdivision maps and street tree installations set back from utilities, signs and poles.

|                              | <u>2005-06</u><br><u>Actual</u> | <u>2006-07</u><br><u>Budget</u> | <u>2006-07</u><br><u>Estimated</u> | <u>2007-08</u><br><u>Budget</u> |
|------------------------------|---------------------------------|---------------------------------|------------------------------------|---------------------------------|
| <b>PROGRAM EXPENDITURES:</b> |                                 |                                 |                                    |                                 |
| Salaries and Benefits        | \$326,217                       | \$341,684                       | \$341,380                          | \$355,501                       |
| Services and Supplies        | 18,621                          | 28,950                          | 29,200                             | 29,200                          |
| Capital Outlay               | 595                             | 1,000                           | 24,865                             | 1,000                           |
| <b>Total Expenditures</b>    | <b>\$345,433</b>                | <b>\$371,634</b>                | <b>\$395,445</b>                   | <b>\$385,701</b>                |

|   | <u>2005-06</u><br><u>Actual</u> | <u>2006-07</u><br><u>Actual</u> | <u>2007-08</u><br><u>Budget</u> |
|---|---------------------------------|---------------------------------|---------------------------------|
| <b>FULL TIME AND REGULAR PART-TIME POSITIONS:</b> |                                 |                                 |                                 |
| City Engineer                                     | 1.00                            | 1.00                            | 1.00                            |
| Deputy City Engineer                              | 1.00                            | 1.00                            | 1.00                            |
| Engineering Technician I/II                       | 1.00                            | 1.00                            | 1.00                            |
| Administrative Services Assistant                 | 1.00                            | 1.00                            | 1.00                            |
| <b>Total</b>                                      | <b>4.00</b>                     | <b>4.00</b>                     | <b>4.00</b>                     |

**SERVICE LEVEL CHANGES:**

None



DEPARTMENT: Engineering  
 PROGRAM: Development  
 FUND: General  
 ACCOUNT: 44124

**PROGRAM GOALS:**

To provide complete and timely responses to all Customer Service Requests, including: referrals, response to questions, permit and insurance review, inspections and coordination with other City departments and outside agencies (County, State, utilities, etc.).

**PROGRAM OBJECTIVES:**

To monitor and improve the quality of work flow as Customer Service Requests become more complex. Work with Construction Division to make digitally archived documents available to citizens and other departments. Create an archiving and file system that will allow future customers to view what activity has been performed in the past.

**PERFORMANCE MEASURES:**

| Program/Service Outcomes: (based on program objectives)                       | 2005-06<br>Actual | 2006-07<br>Estimated | 2007-08<br>Budget |
|---|-------------------|----------------------|-------------------|
| Implement policy to perform timely responses to all Customer Service Requests | Yes               | Yes                  | Yes               |
| Make digitally archived documents available to citizens and other departments | N/A               | N/A                  | Yes               |
| Publish annual 5 Year Capital Improvement Program                             | Yes               | Yes                  | Yes               |

**Program/Service Outputs: (goods, services, units produced)**

|   |     |     |     |
|---|-----|-----|-----|
| # of Customer Service Requests  | 500 | 600 | 700 |
| # of Telephone inquiries  | 400 | 500 | 600 |
| # of Office Visits  | 150 | 200 | 250 |
| # of Building Permit Referrals  | 270 | 300 | 350 |
| # of Community Development Referrals  | 4   | 5   | 8   |
| # of Humboldt County Referrals  | 47  | 52  | 60  |
| # of Field Inspections completed within 30 days                                   | 230 | 280 | 330 |
| # of Permits issued - water, sewer, encroachment                                  | 250 | 300 | 350 |
| # of Insurance reviews for permits, service agreements and construction contracts | 678 | 700 | 780 |
| Update 5-Year CIP   | 0   | 1   | 1   |







# Engineering



**DEPARTMENT:** Engineering  
**PROGRAM:** GIS Program

**FUND:** General  
**ACCOUNT:** 44126

**PROGRAM DESCRIPTION:**

The Geographic Information Systems (GIS) Program provides GIS technology in support of the effective and efficient operation, maintenance and improvement of the City's infrastructure and to provide GIS technology to the entire City of Eureka enterprise.

|                              | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Budget</u> | <u>2006-07<br/>Estimated</u> | <u>2007-08<br/>Budget</u> |
|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|
| <b>PROGRAM EXPENDITURES:</b> |                           |                           |                              |                           |
| Salaries and Benefits        | \$64,034                  | \$76,505                  | \$74,573                     | \$75,865                  |
| Services and Supplies        | 5,389                     | 4,160                     | 4,960                        | 4,960                     |
| Capital Outlay               | 22,000                    |                           |                              |                           |
| <b>Total Expenditures</b>    | <b>\$91,422</b>           | <b>\$80,665</b>           | <b>\$79,533</b>              | <b>\$80,825</b>           |

|   | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Actual</u> | <u>2007-08<br/>Budget</u> |
|---|---------------------------|---------------------------|---------------------------|
| <b>FULL TIME AND REGULAR PART-TIME POSITIONS:</b> |                           |                           |                           |
| GIS Coordinator                                   | 1.00                      | 1.00                      | 1.00                      |
| <b>Total</b>                                      | <b>1.00</b>               | <b>1.00</b>               | <b>1.00</b>               |

**SERVICE LEVEL CHANGES:**

None.

# Engineering



**DEPARTMENT:** Engineering  
**PROGRAM:** GIS Program

**FUND:** General  
**ACCOUNT:** 44126

**PROGRAM GOALS:**

To provide GIS technology to all facets of City of Eureka budget practices, as well as to maintain and upkeep existing GIS technologies

**PROGRAM OBJECTIVES:**

- The City of Eureka GIS Program has the following current objectives:
- 1.) Carry out CDBG funded, GIS Services Phase II.
  - 2.) Create a new GIS Technician position.
  - 3.) Perform updates and maintenance to existing GIS technologies with the City of Eureka enterprise.
  - 4.) Create new GIS data and applications in support of core business needs.

**PERFORMANCE MEASURES:**

| <b>Program/Service Outcomes: (based on program objectives)</b>                                  | <b>2005-06<br/>Actual</b> | <b>2006-07<br/>Estimated</b> | <b>2007-08<br/>Budget</b> |
|---|---------------------------|------------------------------|---------------------------|
| Perform updates and maintenance to existing GIS technologies with the City of Eureka enterprise | Yes                       | Yes                          | Yes                       |
| Create new GIS data and applications  | Yes                       | Yes                          | Yes                       |
| Employ services of GIS Intern   | N/A                       | N/A                          | Yes                       |
| Procure CDBG Planning & Technical grant   | Yes                       | N/A                          |                           |

**Program/Service Outputs: (goods, services, units produced)**

|                            |     |      |      |
|----------------------------|-----|------|------|
| # of Layers maintained     | 20  | 42   | 42   |
| # of Technical hours       | 600 | 1000 | 1500 |
| # of GIS Coordinator hours | 600 | 500  | 500  |
| # of GIS Technician hours  | 600 | 500  | 1000 |

# Engineering



**DEPARTMENT:** Engineering  
**PROGRAM:** Property Management

**FUND:** General  
**ACCOUNT:** 44510

**PROGRAM DESCRIPTION:**

The Property Management Program is responsible for all the operational activities of City-owned and Redevelopment Agency-owned real property in accordance with established real property procedures and policies. Property Management includes managing real property leases, sales and acquisition, determining and adjusting base rents, coordinating inspections and providing responsible and complex staff assistance to various City departments.

|                              | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Budget</u> | <u>2006-07<br/>Estimated</u> | <u>2007-08<br/>Budget</u> |
|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|
| <b>PROGRAM EXPENDITURES:</b> |                           |                           |                              |                           |
| Salaries and Benefits        | \$54,577                  | \$80,743                  | \$72,875                     | \$78,539                  |
| Services and Supplies        | 3,430                     | 5,000                     | 3,252                        | 5,500                     |
| <b>Total Expenditures</b>    | <u>\$58,007</u>           | <u>\$85,743</u>           | <u>\$76,127</u>              | <u>\$84,039</u>           |

|   | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Actual</u> | <u>2007-08<br/>Budget</u> |
|---|---------------------------|---------------------------|---------------------------|
| <b>FULL TIME AND REGULAR PART-TIME POSITIONS:</b> |                           |                           |                           |
| Project Manager                                   | 1.00                      | 1.00                      | 1.00                      |
| <b>Total</b>                                      | <u>1.00</u>               | <u>1.00</u>               | <u>1.00</u>               |

**SERVICE LEVEL CHANGES:**

None.

# Engineering



**DEPARTMENT:** Engineering  
**PROGRAM:** Property Management

**FUND:** General  
**ACCOUNT:** 44510

**PROGRAM GOALS:**

Maintain, manage and enhance all City owned properties. Ensure all properties are being utilized to achieve the highest possible benefit to the City.

**PROGRAM OBJECTIVES:**

Maintain existing level of service in Property Management Division while continuing to merge Property Management into the upgraded position of Project Manager. Manage and reorganize Property Management duties to accommodate the oversight of additional Capital Improvement Program Projects. Separate and track hours worked in both disciplines. Develop and implement additional performance measures for Property Management.

**PERFORMANCE MEASURES:**

| <b>Program/Service Outcomes: (based on program objectives)</b>    | <b>2005-06<br/>Actual</b> | <b>2006-07<br/>Estimated</b> | <b>2007-08<br/>Budget</b> |
|---|---------------------------|------------------------------|---------------------------|
| Property Acquisitions   | N/A                       | Yes                          | Yes                       |
| Timely acquisition of parcels for Capital Improvement Projects    | Yes                       | Yes                          | Yes                       |
| Develop maintenance program for all City-owned open space parcels | Yes                       | Yes                          | Yes                       |

**Program/Service Outputs: (goods, services, units produced)**

|                                     |     |    |    |
|-------------------------------------|-----|----|----|
| # of Tideland leases                | N/A | 14 | 14 |
| # of Airport leases                 | N/A | 13 | 14 |
| # of Office/Commercial/Other leases | N/A | 27 | 25 |

# Engineering



**DEPARTMENT:** Engineering  
**PROGRAM:** Municipal Airport

**FUND:** Airport  
**ACCOUNT:** 44520

**PROGRAM DESCRIPTION:**

The Airport Program plans, coordinates and oversees the operation of the Eureka Municipal Airport in accordance with established procedures and policies.

|                              | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Budget</u> | <u>2006-07<br/>Estimated</u> | <u>2007-08<br/>Budget</u> |
|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|
| <b>PROGRAM EXPENDITURES:</b> |                           |                           |                              |                           |
| Salaries and Benefits        |                           |                           |                              |                           |
| Services and Supplies        | 14,609                    | \$24,961                  | 21,909                       | \$18,733                  |
| <b>Total Expenditures</b>    | <u>\$14,609</u>           | <u>\$24,961</u>           | <u>\$21,909</u>              | <u>\$18,733</u>           |

|   | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Actual</u> | <u>2007-08<br/>Budget</u> |
|---|---------------------------|---------------------------|---------------------------|
| <b>FULL TIME AND REGULAR PART-TIME POSITIONS:</b> |                           |                           |                           |
| None  |                           |                           |                           |

**SERVICE LEVEL CHANGES:**

None.

**PROGRAM GOALS:**

Strategically manage, maintain and enhance the Eureka Municipal Airport in order to benefit the community and meet council-approved policies and objectives.

**PROGRAM OBJECTIVES:**

Develop and implement a Five-Year Capital Improvement Program for the maintenance and enhancement of the Eureka Municipal Airport.

**PERFORMANCE MEASURES:**

|   | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Estimated</u> | <u>2007-08<br/>Budget</u> |
|---|---------------------------|------------------------------|---------------------------|
| <b>Program/Service Outcomes: (based on program objectives)</b>    |                           |                              |                           |
| Monitor lease agreements on an annual basis                       | Yes                       | Yes                          | Yes                       |
| Maintain the Airport Facility meeting all safety requirements     | Yes                       | Yes                          | Yes                       |
| Implement Five-Year Capital Improvement Program                   | No                        | No                           | Yes                       |
| <b>Program/Service Outputs: (goods, services, units produced)</b> |                           |                              |                           |
| Number of leases  | 11                        | 11                           | 11                        |

# Engineering



**DEPARTMENT:** Engineering  
**PROGRAM:** Golf Course

**FUND:** Airport  
**ACCOUNT:** 44510

**PROGRAM DESCRIPTION:**

The Golf Course Program provides oversight and administration of the lease for private management, operation and improvement of the Eureka Municipal Golf Course.

|                              | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Budget</u> | <u>2006-07<br/>Estimated</u> | <u>2007-08<br/>Budget</u> |
|------------------------------|---------------------------|---------------------------|------------------------------|---------------------------|
| <b>PROGRAM EXPENDITURES:</b> |                           |                           |                              |                           |
| Salaries and Benefits        |                           |                           |                              |                           |
| Services and Supplies        | 17,066                    | \$9,229                   | 9,255                        | \$4,613                   |
| Capital Outlay               |                           |                           |                              |                           |
| <b>Total Expenditures</b>    | <u>\$17,066</u>           | <u>\$9,229</u>            | <u>\$9,255</u>               | <u>\$4,613</u>            |

|   | <u>2005-06<br/>Actual</u> | <u>2006-07<br/>Actual</u> | <u>2007-08<br/>Budget</u> |
|---|---------------------------|---------------------------|---------------------------|
| <b>FULL TIME AND REGULAR PART-TIME POSITIONS:</b> |                           |                           |                           |
| None  |                           |                           |                           |

**SERVICE LEVEL CHANGES:**

None.

**PROGRAM GOALS:**

Maximize the recreational opportunities and environmental amenities of the Eureka Municipal Golf Course

**PROGRAM OBJECTIVES:**

Enhance the Audubon International Cooperative Sanctuary certification through planning, design, funding and implementation of the Martin Slough Restoration Project. Develop and implement a 5-Year Capital Improvement Plan. Develop a methodology to monitor improvement of golfing opportunities.

# Engineering



**DEPARTMENT:** Engineering  
**PROGRAM:** Golf Course

**FUND:** Airport  
**ACCOUNT:** 44510

**PERFORMANCE MEASURES:**

| <b>Program/Service Outcomes: (based on program objectives)</b>    | <b>2005-06<br/>Actual</b> | <b>2006-07<br/>Estimated</b> | <b>2007-08<br/>Budget</b> |
|---|---------------------------|------------------------------|---------------------------|
| Design and permitting of the Martin Slough Restoration Plan       | 10%                       | 25%                          | 50%                       |
| Implementation of the Martin Slough Restoration Plan              | N/A                       | N/A                          | 10%                       |
| Develop a 5-Year CIP for the Eureka Municipal Golf Course         | 100%                      | N/A                          | N/A                       |
| Implement 1st Year Improvements of the 5-Year CIP                 | N/A                       | 90%                          | 10%                       |
| Develop recreational use monitoring measures                      | 100%                      | 100%                         | N/A                       |
| Track and report recreational use                                 | N/A                       | N/A                          | 100%                      |
| <b>Program/Service Outputs: (goods, services, units produced)</b> |                           |                              |                           |
| Playable days   | 232                       | 288                          | 295                       |
| Total rounds played   | 25,061                    | 30,952                       | 31,712                    |