From Trees to Buoys: Best Practices in Asset Management for Parks

SIMON MORGAN
Three Rivers Park District
Senior Manager, GIS & Business Applications
HOW MANY PEOPLE HAVE HEARD OF THREE RIVERS PARK DISTRICT?
WHAT WE HAVE

• 27,000 acres and growing
• 454 miles
• 11 million annual visitors
• 26 parks and 400 buildings
ESTABLISH A NEED

3 Golden Rules:
1. Determine what you want to get out of a system first
2. Establish if the resources are available to maintain the necessary level of effort
3. Develop and enforce business processes
ESTABLISH GOALS

• Replicate functionality of existing system
  - Work management
  - Forestry inventory
• Establish tracking of some assets
• Establish plan to evolve the use of the system over time
ESTABLISH AN ASSET HIERARCHY

- Parks
  - Park Areas
    - Utilities
    - Facilities
    - IT Assets
    - Building Systems
    - Building Assets
  - Pavement
  - Planting Site
  - Nursery
  - Forestry Mgmt Site
ESTABLISH ROLES

Asset Owner

Asset Maintainer

GIS Maintainer
MAINTENANCE
ROUTINE + DAILY WORK

- Large amount of routine work
  - Just gets done
- Lots of workers
- Limited budget to purchase licensing
ROUTINE + DAILY WORK

- License Supervisors, Crew Chiefs, and Specialists
- Established method for park workers to report time
- Created an automated process to capture time reports into Cartegraph OMS
ROUTINE + DAILY WORK

- Not a good solution for staff that need to track or access asset records
- Automation is the exception
- Increases data inaccuracy risk
ASSET TRACKING
Forestry + Nursery Operations

- Massive inventory operation
- Old system—typically had a 3-month backlog
- Active Use Area vs. Forestry Management Area
FORESTRY + NURSERY OPERATIONS

Collect Seed

Establish Seed Bed

Nursery Row

Liner Bed or Planting Site (Bundled Asset)

Planted (Asset)
### NURSERY INVENTORY

![Image of Nursery Inventory System](image.png)

The image shows a section of a nursery inventory system with a list of material locations and their associated work groups. The highlighted location is "4129" which is checked and has the label "Select Field." The material locations listed include:

- LC0424-FULL ROW  - NRM - Forestry
- LC0425-FULL ROW  - NRM - Forestry
- LC0426-FULL ROW  - NRM - Forestry
- LC0427-FULL ROW  - NRM - Forestry
- LC0428-FULL ROW  - NRM - Forestry
- LC0429-FULL ROW  - NRM - Forestry
- LC0430-FULL ROW  - NRM - Forestry
- LC0431-FULL ROW  - NRM - Forestry
- LC0432-FULL ROW  - NRM - Forestry
- LC0433-FULL ROW  - NRM - Forestry
# Nursery Inventory

## Details

- **Part Number:** 1334
- **Quantity on Hand:** 60 ea
- **Value of Stock:** $0
- **Usage Last 30 Days:** 0 ea
- **Average Quantity/Task:** 0 ea
- **Usage Last 90 Days:** 0 ea

## Transaction History

<table>
<thead>
<tr>
<th>Date</th>
<th>Task ID</th>
<th>Activity</th>
<th>Transaction</th>
<th>Location</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/13/2015</td>
<td></td>
<td>Stocked</td>
<td>Stocked</td>
<td>NR0201-CE...</td>
<td></td>
</tr>
<tr>
<td>4/28/2016</td>
<td></td>
<td>Stocked</td>
<td>LN0136-FUL...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/28/2016</td>
<td></td>
<td>Stocked</td>
<td>LW3305-FU...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/12/2016</td>
<td></td>
<td>Decrease Ad...</td>
<td>NR0201-CE...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/29/2017</td>
<td></td>
<td>Transfer From</td>
<td>NR0201-CE...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/29/2017</td>
<td></td>
<td>Transfer To</td>
<td>CS-LBR-FU...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NURSERY INVENTORY
TREES ARE ASSETS TOO
TYING IT ALL TOGETHER

The image depicts a screenshot of a software interface showing a task management system. The task is labeled 'Install Asset Managed Tree 60038' and includes sections for Labor, Equipment, Material, and Other. The Labor section is currently empty, the Equipment section has one entry, the Material section shows a remaining quantity of 1 ea, and the Other section is also empty. The interface is designed to track time, resource usage, and other details for project tasks.
SYSTEM OF RECORD

Task ID: TREAT-1...
Activity: Treatment Form
Asset: OP Site OP67001

Total Cost: $0
Productivity: Cost per Unit - $0.00, Labor Hours - 0, Labor Cost - $0
Equipment: Equipment Cost - $0
Material: Material Cost - $0
Other: Other Cost - $0

Attached Files:
- ReportViewer.aspx?%2fNur...
- BackgroundDataExch...

Date: 4/12/2017 10:45:10 PM
IT DEPARTMENT
# IT INVENTORY

## AC IT Cage - Boxed

- **Location Description:**
  - Address Number:
  - Street:
  - Mobile Location:

## Statistics

<table>
<thead>
<tr>
<th>Total Materials</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stagnant Materials Last 90 Days</td>
<td>2</td>
</tr>
<tr>
<td>Value of Stock</td>
<td>$157</td>
</tr>
<tr>
<td>Materials Below Reorder Point</td>
<td>0</td>
</tr>
</tbody>
</table>

## Materials

<table>
<thead>
<tr>
<th>Material ID</th>
<th>Description</th>
<th>Quantity On Hand</th>
<th>Value Of Stock</th>
<th>Reorder Point</th>
<th>Rev</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT - Barcode Sled</td>
<td>3 ea</td>
<td>$3.00</td>
<td>0 ea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT - Touch POS</td>
<td>21 ea</td>
<td>$21.00</td>
<td>0 ea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT - Desktop</td>
<td>128 ea</td>
<td>$128.00</td>
<td>0 ea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT - Laptop</td>
<td>5 ea</td>
<td>$5.00</td>
<td>0 ea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT - P2PE Device</td>
<td>0 ea</td>
<td>$0.00</td>
<td>0 ea</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Selected 0

1 - 5 of 5
IT ASSETS

**Basic Information**
- ID: 07600
- Computer Name: D-07600
- Serial Number: F76MRW1
- Facility: AC-OFFICEBLDG
- Location Description: Front Desk
- Device Type: Desktop
- Device Purpose: Dedicated Device
- Manufacturer: Dell
- Model: Optiplex 7010
- Device Phone Number: N/A
- Cellular Data Type: None

**Peripherals**
- Monitor: 2 Monitors
- Barcode Scanner: 
- Cash Drawer: 
- Docking Station: 
- External Camera: 
- Label Printer: 
- Fax Printer: 
- Receipt Printer: 

**Addresses**
- Address Number: 2955
- Street: XENIUM LN N
- Location: 2955 Xenium Ln N Plymouth

**Actions**
- Map
- Details
- Inspections
- Tasks
- Linked Assets
- Attached Files
## Payment Card Industry Compliance

![Cartograph interface with inspection details]

- **Inspection ID**: 1
- **Inspected By**: Simon Morgan
- **Inspection Date**: 3/24/2017
- **Asset**: P2PE 08692
- **Inspection CI**: 100
- **Average**: 100
- **Status**: Excellent

### Inspection Details

- **Basic Information**
  - **Inspection Date**: 3/24/2017
  - **Inspected By**: Simon Morgan

### Condition Categories

- **Tamper Inspection**: No Evidence of Tamper, **Score**: 100

### Inspection Notes

- **Notes**: 

### Inspection Attachments

- **Link**: [Link to attachment]
- **Update**: [Update link]
COMING SOON…

- Engineering
- Architecture
- Utilities
- Network (Fiber/Routers)
- Ski Hill
LESSONS LEARNED
MAINTENANCE

- Make it easy
- It just works
- Maintenance folks are suppose to maintain
FORESTRY + NURSERY OPERATIONS

- Dirty barcodes don’t scan
- Automation just needs to work
- iPads are a lifesaver—if you have a data plan
QUESTIONS?

SIMON MORGAN
Three Rivers Park District
Senior Manager, GIS & Business Applications
simon.morgan@threeriverspark.org