RevPlan

Florida Rural Water Association Annual Conference

August 6, 2019

RAFTELIS

RevPlan Overview

Genesis of the Project

- FDEP funding FRWA on behalf of their rural clients
- They built an AMP (DiamondMaps) but no financial
- Can you build a financial model to work with DiamondMaps?
- Yes!

Project Objectives

- Easy to use (end users rural water utilities and/or FRWA field staff)

- Integrate with DiamondMaps

- "Feel" like Turbo Tax

- Financially feasible

Project Goals

- Replace aging asset management financial planning software supplied by the EPA

- Strengthen usage of web-based asset management mapping tool (Diamond Maps)

- Increase engagement with member communities

- Provide a reality check on the resources needed to maintain these small systems

- Help communities to qualify for state revolving fund no interest loans

Software Project Process

- Data and Systems Review
- Design and Requirements
- Prototyping
- Programming and Database Development
- Systems Integration
- Documentation and Training
- Post Go-Live Support
- Continued Maintenance

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Why Web Based

- Integrate with web-based asset management tool

- Focus on simplicity and user friendliness (hiding the details)

- Multiuser environment supports nearly 2,000 member communities with one model

- Database platform will eventually facilitate mining the data entered by communities

Demonstration

Overview

- When a user logs in, they land on the Overview screen.

- Here they can create a new rate model or continue working on an existing one.

- We'll continue this "2019 Retreat Presentation Model".

- The data in this model was mocked up by Joe Williams to simulate a small and simple utility.

Data Entry

- We arrive at a series of Data Entry screens.

- These screens guide the user through entering financial data for their utility.

- The progress bars fill in as the user marks screens as complete, so they can see their overall progress and which items they still need to attend to. Here you can see we've left a screen incomplete to show a little data entry.

- Clicking Resume would bring us to the first not completed screen. Instead we'll click Next to go to the first screen in the progression.

System Statistics

- We begin by asking the user for high-level information about their system.

- This information isn't directly used in the model outputs, but it's used to "gut checks" some of the data they'll enter later in the model.

- These "?" buttons open the Help panel with additional guidance for each line item.

Capital Financing Plan

- This is another screen gathering high-level information.

- This screen is modeled after one of the forms required by FDEP for applications to State Revolving Fund loans.

Assets

- Next we ask the user to enter data about the system's various assets.
- RevPlan has loosely integration with DiamondMaps, which is an asset management system that FRWA promotes among it's members. DiamondMaps isn't required to use RevPlan, but if the utility uses DiamondMaps they can import asset data from it.
- The list of assets here is modeled after the categories FRWA uses when setting up utilities with DiamondMaps.
- The user enters data for Drinking Water and then for Wastewater.
- This asset data is then summarized.
- And the rolled up numbers for "Annual Replacement Costs of System" from this screen are automatically entered on the CIP screen which we'll come to shortly.

Existing Debt

- Here we ask the user for information about their existing debt.

- I've left this blank to show some of the assistance RevPlan provides when entering data.

- Entering broad information about the loan in the upper table automatically fills in the Debt Service table below.

- The user can then edit those values as needed if the debt service changes during the forecast period.

Operating Expenses & Maintenance

- Next we ask for the utility's operating expenses.

Capital Improvement Plan

- And here the user identifies capital improvement projects anticipated during the forecast period.

- We see those rolled up Annual Replacement Cost numbers from the Assets screen have been automatically as "Wastewater Collection" and "Water Distribution".

- If a project is entered here that's funded by a Future Loan, a corresponding loan is created on the Anticipated Loans screen coming next.

Anticipated Loans

- Here we see the anticipated loans associated with the loan-funded CIP line items.

- RevPlan populates these loans with default properties which the user can modify. But the Project Funds value is directly tied to the CIP line item and changes when the user edits that.

Identify Customer Classes

- Next we ask the user to identify the various customer classes use by the utility - whether the utility designates rates for drinking water or wastewater for those customers, and whether there are separate rates for inside vs outside city.

Rates & Revenue

- And then for each of those customer classes, we ask for base charges, number of connections, usage charges, and amount of water billed.

Other Revenues

- Here the user can enter other revenue sources such as those from Impact Fees.

Utility Reserves

- And here they and can enter the amounts held in reserve by the utility.

- After completing this screen, the we're brought to the outputs.

Output

- Here we have the Dashboard and Tabular Schedules output screens.

Dashboard

- On the dashboard, we have a set of charts typical of a rate model.

- The Adjustments form allows the user to adjust rate and customer base variables and see effects on the outputs.

- Looking at the charts, we can see this utility is not doing great as things currently stand. Water expenses are quickly approaching revenues and wastewater revenues are exceeding them.

- Maybe we want to rethink the large loan we're taking for that water tank capital improvement project. Let's go back to the CIP screen and fund some of that with grants instead.

- Now if we go to the Anticipated Debt screen we see that the project funding and debt service has been updated accordingly.

- And returning to the Dashboard we can see we've given ourselves a little breathing room in water revenues.

- Next let's try adjusting Base and Usage charges by 1% for Water and by 3% for Wastewater.

Tabular Schedules

And here we have Tabular Schedules:

- breaking down the numbers shown in the dashboard charts (Revenue Requirements)

- providing detail, summaries, and forecasts of info from data entry screens (CIP Schedule, Debt Service Schedule, Operating Expense Projection)

- a detailed rate schedule with adjustments applied (Rate Schedule)

- and a detailed breakdown of current rate revenues for each customer class. (Rate Revenue)

Utilities using RevPlan

- Baldwin
- Bartow
- Bowling Green
- Century
- Chattahoochee
- Clewiston
- Eatonville
- Everglades City
- Florida City
- Freeport
- Homosassa Special Water District
- Jay DW
- Milton
- Monticello

- Orange City
- Palatka
- Penney Farms
- Plantation Bay
- Polk City
- Quincy
- South Santa Rosa Utility System (SSRUS)
- Spring Lake Improvement District (SLID)
- Springfield
- White Springs
- Yankeetown

Thank you!