

# Reclamation Manual

## Directives and Standards

---

### Graphing Format and Content Requirements

1. **Purpose of this Appendix.** The purpose of this Appendix is to provide standardized graphic presentation requirements for the Statement of Project Construction Cost and Repayment (SPCCR). The objective is to make the SPCCRs more user-friendly and to provide a visual representation of the overall project status. Management believes these charts are a useful information source during consultations with water users. Project managers are encouraged to familiarize their beneficiaries with the graphs.
  
2. **Graphing Format Requirements.** This Appendix provides standardized requirements for several graphic presentations. All graphs are to be developed and maintained using Excel spreadsheets. While only two of the graphs presented in this Appendix are required for every SPCCR, the regions are encouraged to utilize the other graphic presentations. The following standards apply to all graphs included in an SPCCR:
  - A. The visual representation will be demonstrated as pie charts.
  - B. The pie charts for each project is based on that project's SPCCR summary statement totals, as developed and revised each fiscal year in each region.
  - C. The pie charts for each project are worksheets within that project's SPCCR spreadsheet application. The most efficient design for creating pie charts is to set up the graphic worksheet so the pie chart data is automatically updated as the preparer updates SPCCR information each year.
  - D. The pie charts must be posted to each region's intranet on a yearly basis for easy reference.
  - E. Each of the sliced sections in the pie charts will have a corresponding dollar amount (in units of \$1,000) and percentage amount.
  - F. The **Total Cost Allocation chart** and the **Total Repayment Received chart** are the two charts that are required for every SPCCR.
    - (1) These two required charts provide both an overview of the total allocation of project costs among all project purposes, and total repayment responsibilities.
    - (2) The Total Cost Allocation chart must display every reimbursable and all material nonreimbursable project purpose separately. Smaller nonreimbursable project purposes may be combined to improve the visual effectiveness of the chart. The combined total cost of the project purposes displayed in the graph must equal the total cost of that project.

# Reclamation Manual

## Directives and Standards

---

- (3) The Total Repayment Received chart must include all repayment sources for reimbursable costs, various sources of crediting, and the project amount allocated to nonreimbursable purposes. Footnote any excess repayment over costs and explain the cause.

G. **Mandatory Color Formats.** In order to provide quick and easy visual reference for the largest components of cost and repayment, maintain uniform color representation for Irrigation, Municipal and Industrial (M&I) water, and Commercial Power purposes. All other purpose color presentations are optional. **All charts must use the mandatory standardized colors identified below by purpose for both costs and repayment data. Shades of the mandatory colors can be used.**

- (1) Irrigation – Green with a Dot Pattern
- (2) M&I Water – Blue with Diagonal Lines
- (3) Commercial Power – Orange with a Plaid Pattern
- (4) Flood Control – Yellow with gradient shading
- (5) Fish & Wildlife (F&WL) and Recreation – Pink with horizontal lines
  - (a) F&WL is combined with recreation on the graph because project reviews have found the work charged to these two project purposes is frequently combined under just one purpose or crosses between the two purposes.
  - (b) The Chart Wizard assigns different shades to the background and strips unless the data is combined into one amount & title.

3. **Optional Graphic Displays.** Additional detailed charts can be created from SPCCR data.

A. **Repayment Details by Project Purpose.** These charts provide detailed repayment information for each reimbursable purpose by beneficiary. These displays help water users visually identify and compare the percentage they are contractually bound to repay of a specific project purpose with the total amount of repayment assigned to that specific purpose.

- (1) **Total Irrigation Repayment Chart.** The graph illustration of the total repayment breakdown for irrigation is usually presented first. It shows the relative repayment responsibilities from all sources.
  - (a) Irrigation repayment can be further detailed by two additional charts that show current repayment status and current contractual status. These two graphs are necessary to differentiate the total balance owed on the irrigation

# Reclamation Manual

## Directives and Standards

portion of the project and the balance owed on the specific contractual obligation.

- (b) The Current Irrigation Repayment Chart shows the current status of repayment from all sources, i.e., irrigator repayment, other credits, any legislative deferrals, and anticipated power assistance, if any.
  - (c) The Irrigation Repayment Contract Status Chart provides specific information on the status of the irrigators' contractual obligation.
- (2) **Total M&I Repayment Chart or Total Power Repayment Chart.** Arrange reimbursable project purpose repayment charts for M&I water and power similarly to the irrigation repayment section described above.
- (a) A pie chart illustrating each entity's repayment is beneficial when there are two or more repayment entities for a reimbursable purpose.
- (3) **Total Nonreimbursable Allocation Chart.** A pie chart identifying each of the nonreimbursable project-purposes and their allocations can be very effective when there are numerous project purposes included in the SPCCR.
- (4) **Total SOD Repayment by Project Purpose.** A pie chart identifying SOD repayment by project purpose would be beneficial for responding to inquires.
4. **Pie Chart Development Instructions.** The development instructions included in this Appendix are based upon the use of a separate worksheet where the cost allocation totals and the repayment totals from the summary statement are captured in a columnar manner by project purpose. The project purpose, cost totals, and repayment totals are identified in separate columns. Below is an example.

<u>Reclamation Project Name</u> (Based on SPCCRs for FY XXXX)	(\$'s in thousands)		
	<b>Total Project Construction Cost Allocation</b>	<b>Total Project Repayment</b>	<b>Total Anticipated Future Repayment and Other Credits</b>
Irrigation	\$175,000	\$49,000	126,000
Commercial Power	285,000	89,000	196,000
Municipal & Industrial	89,000	36,000	53,000
Fish & Wildlife and Recreation <sup>1</sup>	128,000	0	128,000
Flood Control	60,000	0	60,000
Nonreimbursable Safety of Dams	100,000	0	100,000
<b>Total</b>	<b>\$837,000</b>	<b>\$174,000</b>	<b>663,000</b>

<sup>1</sup> Refer to Paragraphs 2.G.(5)(a) and (b) for an explanation of why these two project types are combined on this table.

# Reclamation Manual

## Directives and Standards

---

### A. Setting up Labels and Data.

- (1) Enter the title of the pie chart, i.e., Total Project Construction Cost Allocation or Total Project Repayment as shown above.
- (2) Enter dollars rounded to the nearest thousand and in \$1,000 units, i.e., \$1,786,756.89 becomes \$1,787. To display the amounts in thousands, either move the decimal 3 places to the left or divide the amount by \$1,000.
- (3) Irrigation, commercial power, and M&I must to be displayed separately. Substantially immaterial nonreimbursable or reimbursable allocations may be grouped for graphic presentation when individual presentation would cause the chart to be ineffective.

### B. Formatting Cells.

- (1) **Amounts.** Click on the columns so that columns with dollar values are selected and format cells to be:
  - (a) Select **currency**.
  - (b) Select **zero (0)** decimal places.
- (2) **Summation.** Once all the labels and data are entered, the last row must include a total for each column of values.

### C. Identifying Project Name.

Before a pie chart is created, be sure the project title is at the top of the spreadsheet. See the table example above.

- (1) **Project Name.** Display the project name in capitals and bold/underline.
- (2) **Sub-title.** A sub-title in parentheses that reads: (Based on SPCCRs for FY XXXX) is required under the project title.
- (3) **Placement.** The project name and sub-title for the spreadsheet must appear at the top of each page.

### D. Displaying Total Amounts.

The total amount must be displayed in the pie chart title as a highlighted line. Refer to the pie charts displayed after Paragraphs 5.

### E. Creating Pie Charts in Excel.

## Reclamation Manual

### Directives and Standards

---

- (1) **Chart Wizard.** Select **Insert** from the standard tool bar. Expand the drop-down menu box and select **Chart**. The Chart Wizard box will appear. There are four steps to the process.
  - (a) **Chart Type.** Chart Types is step one. Select the **Standard Type** tab. Then select **pie** from the **Chart Type** display on the left.
  - (b) **Chart Visual Display.** Once **pie** is selected, the right side of the **Standard Type tab**, which is the **Chart sub-type** display, will change and six different pie charts examples will appear, two rows with three examples in each. Select the second example in the second row, i.e., the **fifth choice**, which will produce an exploded pie with a 3-D visual effect.
  - (c) **Move to Step Two.** Select **Next** to move to the second step.
- (2) **Data Source.** The Chart Wizard-Chart Source Data box will appear. This is the second step. There are two tabs in this box. Select the **Data Range** tab.
  - (a) **Data Range.** Click in the **Data range** box at the center of the **Data Range** tab and then highlight the data and label cells to be included in the chart. Refer to the table displayed below Paragraph 4. All cells except the last row would be selected.
    - (i) **Data.** The data must include the project purposes and total cost amounts for each purpose located in column B or C in the spreadsheet. Amounts must be in \$1,000 units.
    - (ii) **Total Amount.** Do not include the **Total Amount** row. The **Total Amount** data will be shown outside of the chart as described in Paragraphs 4.D.(1) and (2) above.
    - (iii) **Series In.** Below the **Data range** box is a field titled **Series in:** with two choices, i.e., **Columns** and **Rows**. Select **Columns**.
  - (b) **Move to Step Three.** Select **Next** to move to the third step.
- (3) **Chart Options.** The Chart Wizard-Chart Options box will appear. This is step three. This box has three tabs, i.e., Titles, Legend, and Data Labels.
  - (a) **Titles Tab.** Select the **Titles** tab. Type the appropriate chart title on this tab. The required chart labels are Total Project Construction Cost Allocation or Total Project Repayment. The titles used for any optional charts are not standardized but must be adequate to identify the data accurately.

## Reclamation Manual

### Directives and Standards

---

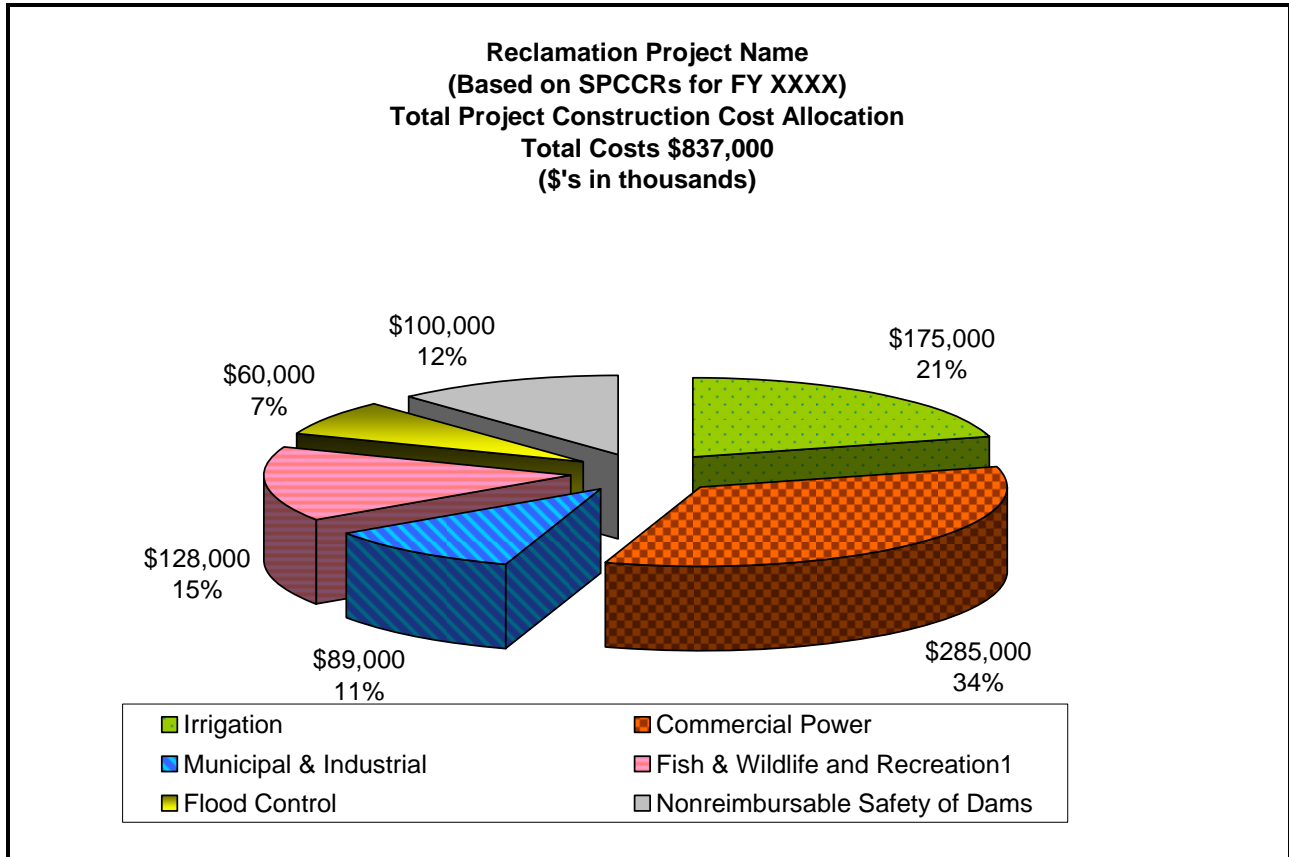
- (b) **Legend Tab.** Select the **Legend** tab. There is a **Show legend line** and a square box in the upper left corner of this tab. Click in the box if a checkmark is not already present. This action will cause the legend to appear for the graph on the worksheet. Below the **legend** line are the **Placement** options. The selection made here will determine where the legend will appear in relation to the graph; select one.
- (c) **Data Labels tab.** Select the **Data Labels** tab. This tab is used to add specific data information for each slice of the pie chart.
- (d) Select **value** and **percentage** for the two required charts. The data labels the regions select for optional charts are not standardized. The **Separator** box provides display options that may be used to keep the value and percentage from looking like one number. Select the dropdown arrow and select the options that provides the best visual display.
- (e) **Move to Step Four.** Select **Next** to move to the fourth and final step.
- (4) **Chart Location.** The Chart Wizard-Chart Location is the fourth and final step.
  - (a) No action is needed if the option selected appropriate. Select **Finish**.
- F. **Refining the Pie Chart.** At this point, the pie chart will show up on the worksheet. Adjust the size and placement of pie chart to the following standards.
  - (1) **Font Size.** The titles, data labels and legend must be at least 12-point font.
  - (2) **Format Data Labels.** It may be necessary to change the format of the data labels for such things as to increase the number of decimal places for the percentages. To format data labels, do the following:
    - (a) Right click directly on **data labels** in chart. Select **Format Data Labels**. There are four tabs available to select from, i.e., Number, Patterns, Font, and Alignment. Select the **Number** tab. Then select **Percentage** and in the **Decimal places** box select **2**.
  - (3) **Format Colors and Patterns.** The standardized colors and patterns established in Paragraph 2.G must be used for irrigation, M&I water, and power pie slices. The colors of a pie piece can be changed by selecting and right clicking on the individual pie piece. Select **Format Data Series**. There are three tabs, i.e., **Pattern**, **Data Labels**, and **Options**. Select the **Pattern** tab and select the appropriate standardized color for the irrigation, M&I water, and power pie slices and the desired shade. Do the same for the nonstandard project purpose making sure not to use one of the standardized colors. Below the color choices on this

# Reclamation Manual

## Directives and Standards

same tab is a rectangle labeled **Fill Effects**. Select this rectangle and select the appropriate pattern for the standardized pie slices. The use a pattern or other special effect is encouraged since they will ensure each pie slices can be clearly identified if reproduced in black and white.

5. **Pie Chart Examples.** Examples of the two required pie charts are displayed on the next page based upon the amounts provided in the table found just after Paragraph 4.



# Reclamation Manual

Directives and Standards

