Solar-powered trash cans

Lodi City Council
Sept. 16, 2009
Solar-powered trash cans

**Current operations:**
- 315 trash receptacles in City parks
- Emptied when at least one-third full
- All cans are checked daily
- Labor costs for collections $205,000 in FY08/09
  - 13 field staff expend 5,300 hours
  - Fully burdened hourly rate
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Traditional trash cans:
- Service per week on average: 5x
- Labor cost per service: $2.91
- Total cost/week: $14.50
- Cost of 80 cans: $1,160/week
Plan for solar-powered cans

- Use 20 to replace 80 traditional cans in City parks
  - Research shows visitors seek out compactors to dispose of trash
  - No overflowing cans
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Solar-powered compacting cans:

- Service per week on average: 1 time
- Labor cost per service: $2.91
- Total cost per service per week: $2.91
- 20 cans’ costs: $58/week
- Cost savings vs. 80 cans: $1,102/wk
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Estimated labor savings:
- 80 trash cans x $14.50 = $1,160

Replaced by:
- 20 trash cans x $2.91 = $58

Weekly savings: $1,102

$1,102 x 52 Weeks = $57,304
Other savings

- Minimum savings of 400 gallons of fuel each year.

  Note: 25-percent fewer collection trips actually saves approximately 800 gallons, but figure halved for attainable fuel savings target for the purpose of the grant.
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- Actual fuel savings could exceed 1,000 gallons/year
- Base estimated annual fuel savings: $1,200
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**Summary**

- Labor cost savings: $57,304
- Fuel savings: $1,200

**Total savings** $58,504

Capital cost recovery = 1 year
Actual capital outlay = $0
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