



*Fostering Water Resource Solutions
through Informed Decision-Making,
Cooperation, and Results*

April 9, 2013



Middle East : Water Conflict

- Stressed political climate
- Population growth
- Surface water stressed and polluted
- Diminishing groundwater
- Worsening drought
- Desalination not a near-term solution

Lower Jordan River (2011)



Lower Jordan River (1918)



Lack of Water : The Impact

- Scarce drinking water
- Little excess water for toilet flushing and hand washing
- Reduced student attendance, especially girls
- School closures
- Dependency on municipality and tanker trucks
- Increased costs



Water Resources Action Project: WRAP

- Early 2009, concerned environmental and legal professionals convene
- 501(c)(3), *volunteer*, non-profit formed late 2009: Water Resources Action Project
- Board, leadership, members: diverse political, ethnic, and religious backgrounds
- Operate with strict neutrality



Mission – *Improve quality of life for underserved communities in the Middle East through greater water stewardship, operating with strict political and religious neutrality.*

Vision – *By easing the growing water conflict and educating individuals and institutions at the grassroots level on the value and interconnectedness of water, a greater awareness and appreciation for human health and the environment will be cultivated.*

What Difference Can We Make : Now!

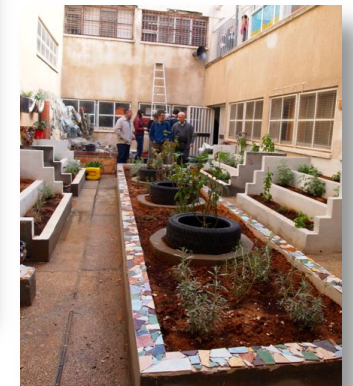
- Harvest precious rainwater through collection systems
- Types: rain barrel model and cistern model
 - Five month rainy season (November-March)
 - System can supply up to 70% of a school's water needs during its nine months of operation
 - Water used for toilet flushing (often accounts for 85% of school's total water usage)
- Environmental educational program
 - Increased awareness and appreciation for finite resource
 - System-wide understanding of ecosystems and connectedness



WRAP's Progress : Pilot Project

Sur Baher Girls School, East Jerusalem

- Underprivileged area in Israel, bordering Palestine
- Serving 800 Arab girls (grades 1-12)
- Dependence on costly, unreliable municipal water
- Engaged leadership and faculty
- Rain barrel collection system (completed February 2011)
- System services the school's two restrooms
- Funded by annual WRAP's membership dues; expansion funded through grant from Jerusalem Fund; in-kind support from FoEME
 - Includes three years of routine maintenance
 - Includes three years of Project Educator (5 hours/week)
- Dedication (May 2011) ribbon cutting with Naomi Sur, Deputy Mayor of Jerusalem
- Monthly reporting: average % of school's total water usage supplied by system = **70%**
- Reduced water bills and greater understanding of water's value, importance of conservation



Sur Baher Reporting

Sur Baher

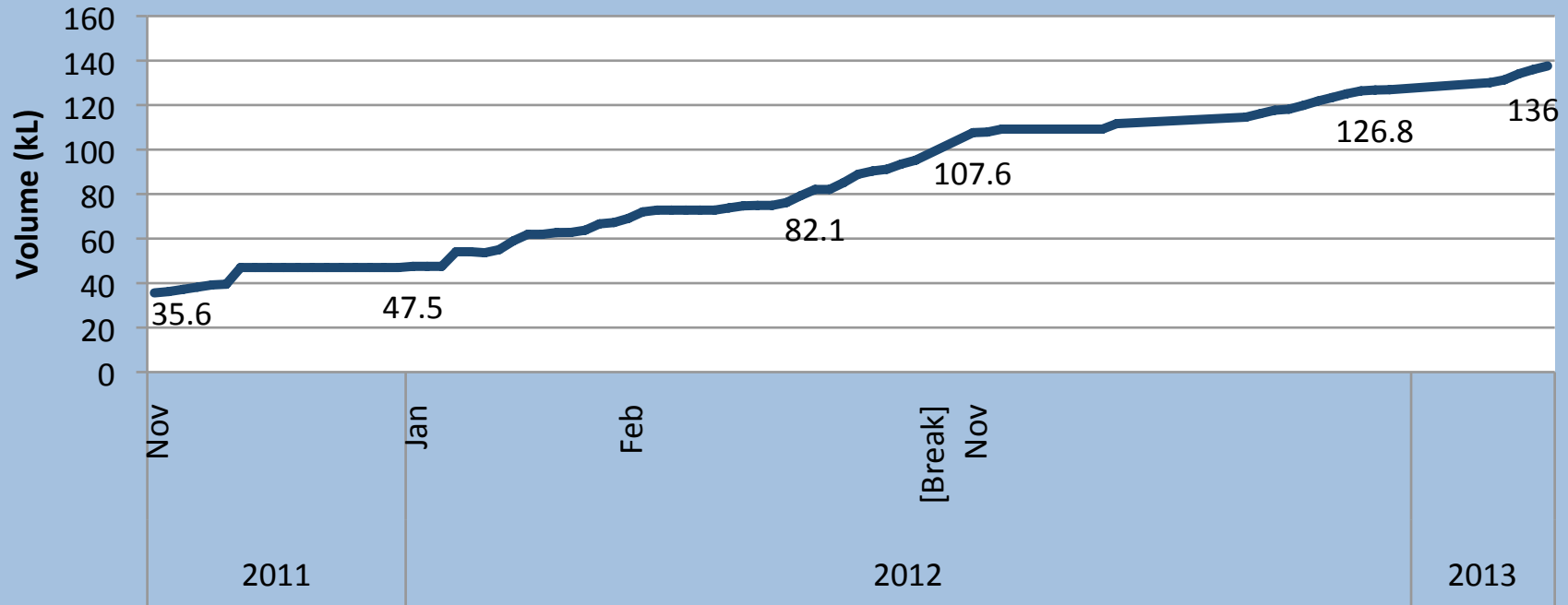
*Running Total of Rainwater
Collected by WRAP's System:*

136,700 liters

Feb 2011 – 2013



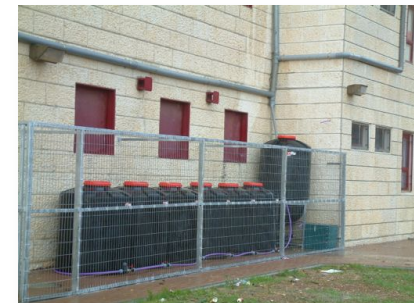
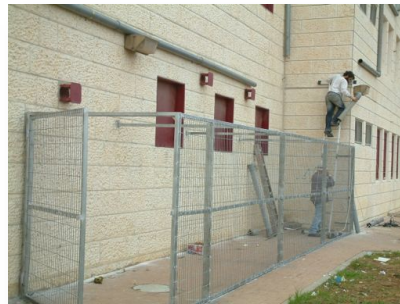
Sur Baher: Total Rain Water Collection & Use



WRAP's Progress : Second Project

Afaq School for the Learning Disabled, East Jerusalem

- Serving 300 Arab special needs boys
- Rain barrel collection system (completed late February 2012)
- Includes three years of maintenance and education
- Funded by annual WRAP dues and match by Only Green Environmental Center
- Awaiting monthly reporting data for 2012-13 rainy season (anticipate equivalent water savings as pilot effort)



Al Afaq Reporting

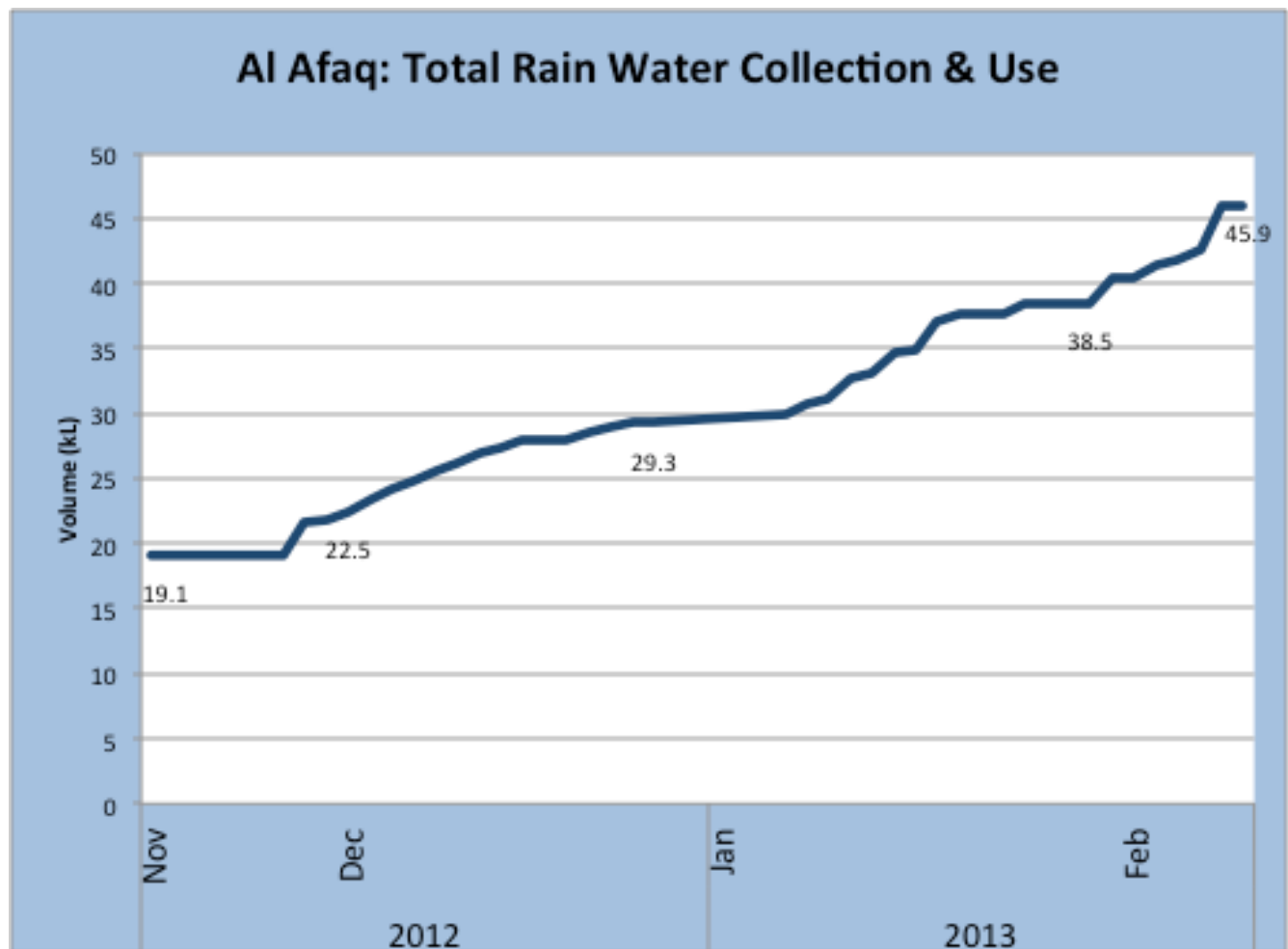


Al Afaq

***Running Total of Rainwater
Collected by WRAP's System:***

45,900 liters

Feb 2012 – 2013



WRAP's Progress : Next Project

Battir Girls High School, Palestinian Territory

Overview

- Located in small rural town of Battir, outside Bethlehem in the West Bank
- 120 Arab high school girls, majority are decedents of Palestinian refugees from Israel
- Friends of the Earth Middle East works within the school, providing environmental curriculum
- Water delivery is limited and costly

Need

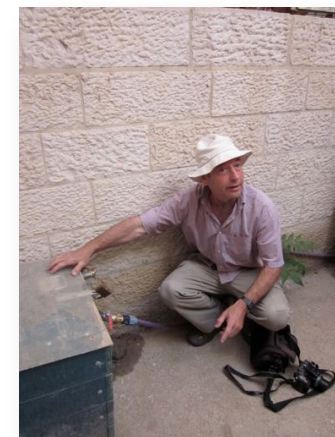
- When the school runs out of water, it can purchase drinking water from a tanker truck, but it is infrequent and unreliable
- Insufficient water remains for toilet flushing and drinking water is scarce
- Bathrooms can be closed and toilets cleaned twice a year, resulting in hygiene issues
- WRAP has visited and vetted school with local partners
- Met with Principal, very supportive of project and implementation of parallel educational program

Path Forward

- Cistern collection system would be needed
- Immediate benefits of additional water and monetary savings include –
 - Continuity of operations during the regular school year
 - Desired summer camp
 - Community garden
- WRAP fully committed to undertaking this project; question remains – how soon can we make this happen?
- Approximately \$25,000 needed to proceed; \$12,000 funding shortfall (\$10,000 pledged by WRAP + 3,000 grant by Jerusalem Fund)
- Growing list of additional schools identified in the region with similar needs

Lessons Learned : Carrying It Forward

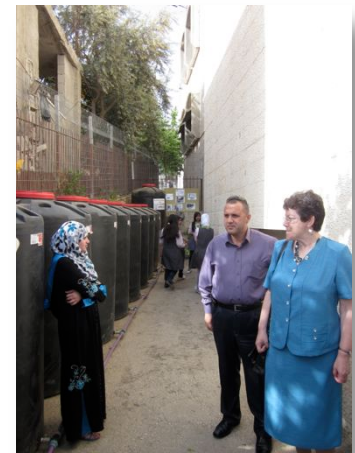
- Fully committed school and community leadership
- Strong educational component is critical
- Detailed screening process and transparency
- Grassroots partner(s)
- Proven contactors and routine maintenance
- Continued follow-up and reporting
- Identify the end game and create a roadmap



Why WRAP : What Makes This Effort Unique?



- *Every penny of every dollar goes directly towards the projects, education, and maintenance*
- NO overhead, NO pass through, NO bureaucracy, NO executive salaries, NO nonsense
- Each effort is fully vetted through an extensive, in-person screening process
- Grassroots partners – Friends of the Earth Middle East and Only Green Environmental Center
- Leveraged dollars from WRAP leadership, partners, grant submittal, and fundraising
- Parallel educational program, creating a network of awareness and ownership
- Metrics and reporting – data, data, data
- Ongoing maintenance by trained technician
- Semi-annual to annual visits to region ensures continued follow-up on every project



Thank You!



Spread the Word

Tell others about the issues, solutions, and WRAP

Feedback

We welcome it!

Join Us

Own a Project – Start to Finish

Stay in Touch

Email – info@wrapdc.org

Website – www.wrapdc.org