

Serving the  
community,  
into the future...

**Wakarusa Water  
Reclamation Facility  
Public Meeting #5**

**Conveyance Corridor**

April 23, 2007

...it's what we do.



**Wakarusa Water Reclamation Facility**  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

**BLACK & VEATCH**

[weknowwater@bv.com](mailto:weknowwater@bv.com)

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Welcome and Meeting Agenda

- Introductions
- Where We Are Today
- Corridor Selection Process
  - Connection points to existing system
  - Preliminary routes considered
  - Selection of proposed alternative
  - Utilities
  - What to expect in the future
  - Current activities
  - Next steps
- Questions
- Open House

BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
www.lawrenceutilities.org/wwrf

## Introductions

### • City Staff



- **Dave Corliss**, City Manager
- **Debbie Van Saun**, Asst City Mgr
- **Dave Wagner**, Utilities Director
- **Lisa Patterson**, Communication Mgr
- **Roger Steinbrock**, Communications
- **Philip Ciesielski**, Utilities Engineer
- **Mark Hegeman**, Wastewater Treat. Mgr
- **Jeanette Klamm**, Utilities  
Publicity/Biosolids
- **Scott Wagner**, Legal Assistant

### • Public Advisory Committee Subgroup

- **Michael Caron**, Save the Wakarusa  
Wetlands
- **Warren Corman**, University of Kansas
- **Terry Riordan, MD**, Former Planning  
Commission Member

### • Black & Veatch



- **Mike Orth**, Project Director
- **John Keller**, Project Manager
- **Alan Ringhausen**, Engineering Manager
- **Page Burks**, Design Engineer

### • Acquisition Team

- **Dan Watkins**, Law Offices of Dan Watkins
- **Tim Orrick**, Foth & Orrick
- **Jason Prier**, Foth & Orrick

### • Patti Banks Associates

- **Patti Banks & Lisa Briscoe**



### • Bartlett & West

- **Joe Caldwell**



BLACK & VEATCH

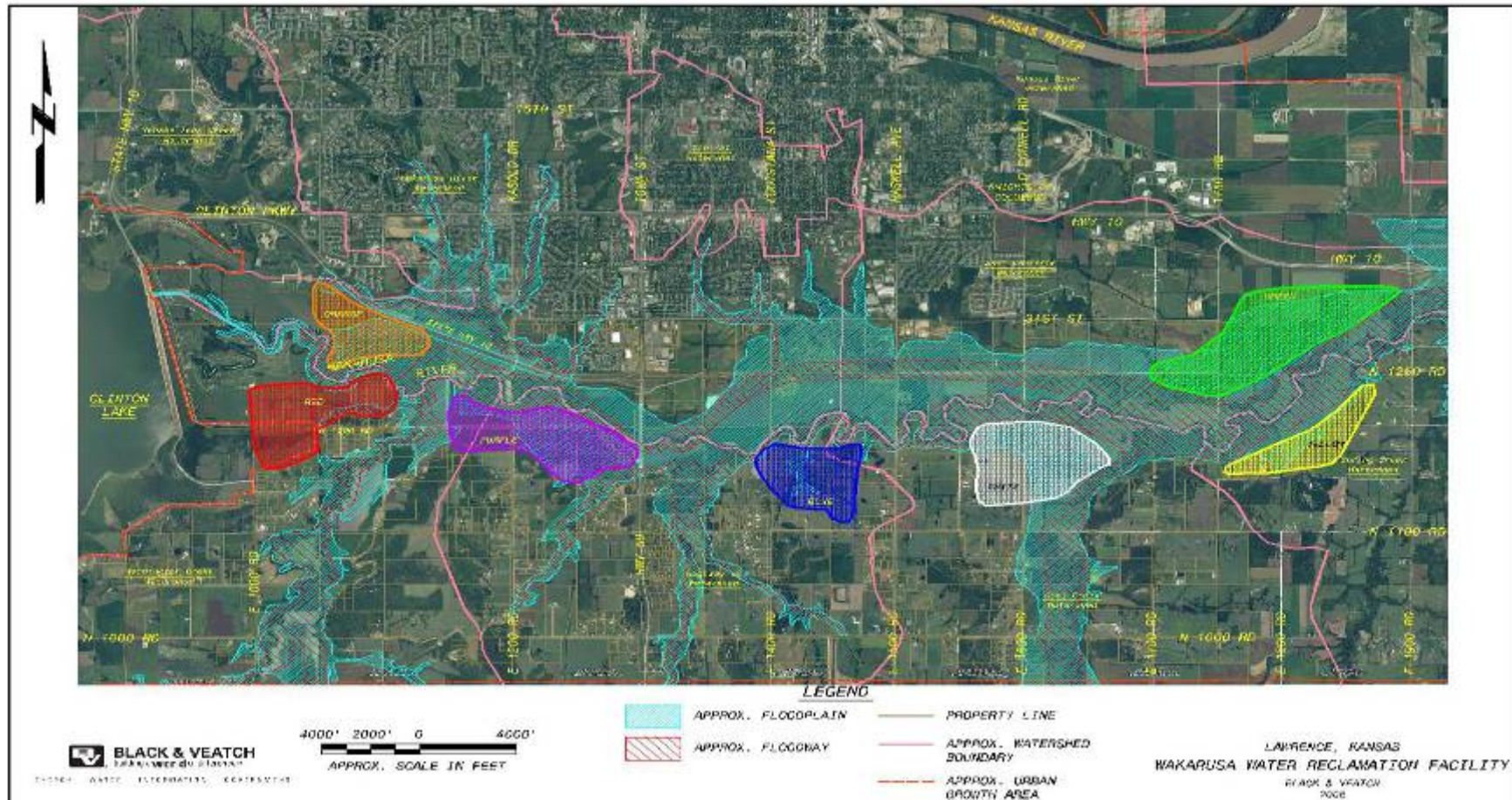
Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
www.lawrenceutilities.org/wwrf

## Site Selection - where we left off...



BLACK & VEATCH

Leading the way...

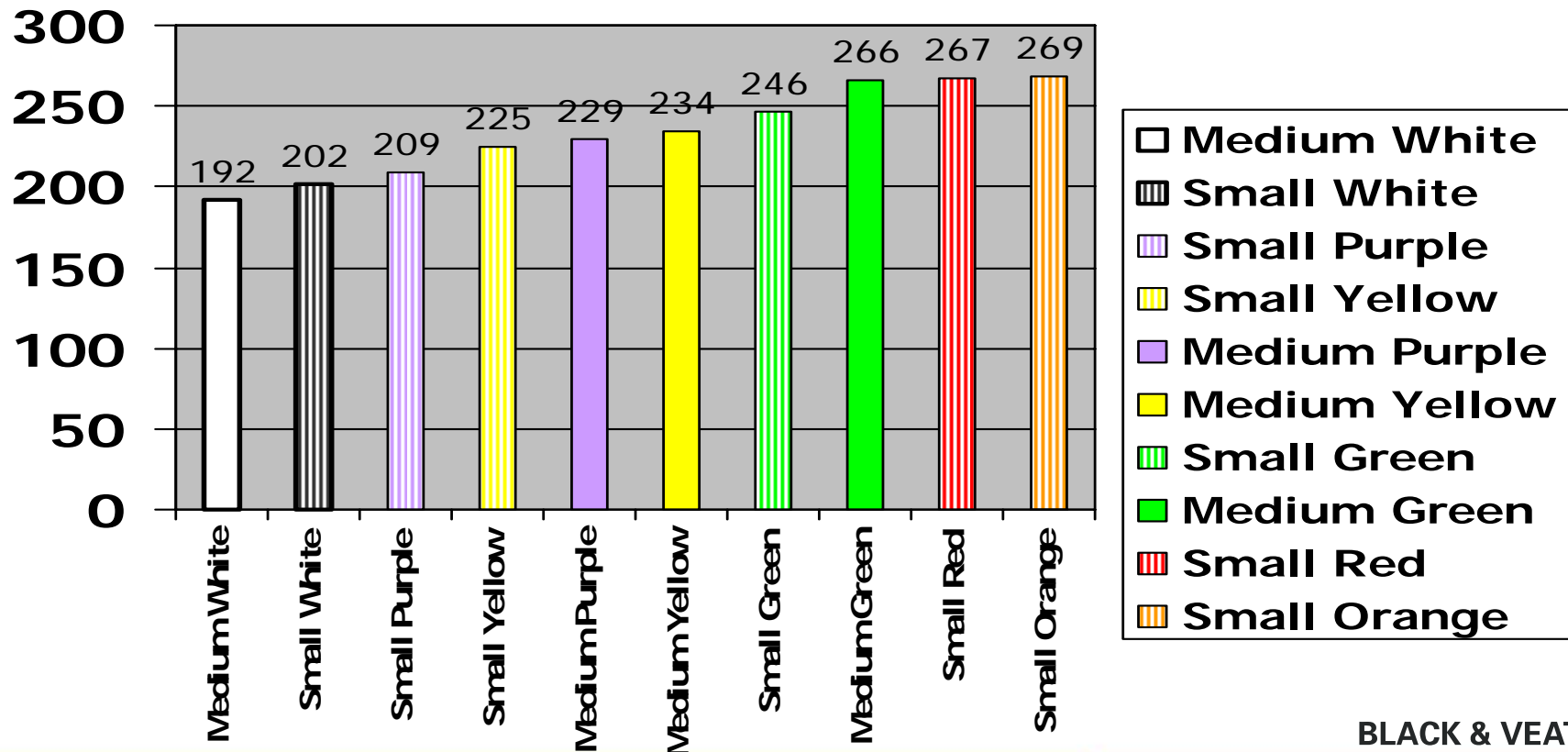
...it's what we do.



Wakarusa Water Reclamation Facility  
www.lawrenceutilities.org/wwrf

## Site Selection - where we left off...

Cost/Benefit Scores for the Top Ten Alternatives  
(Lower score is better)



BLACK & VEATCH

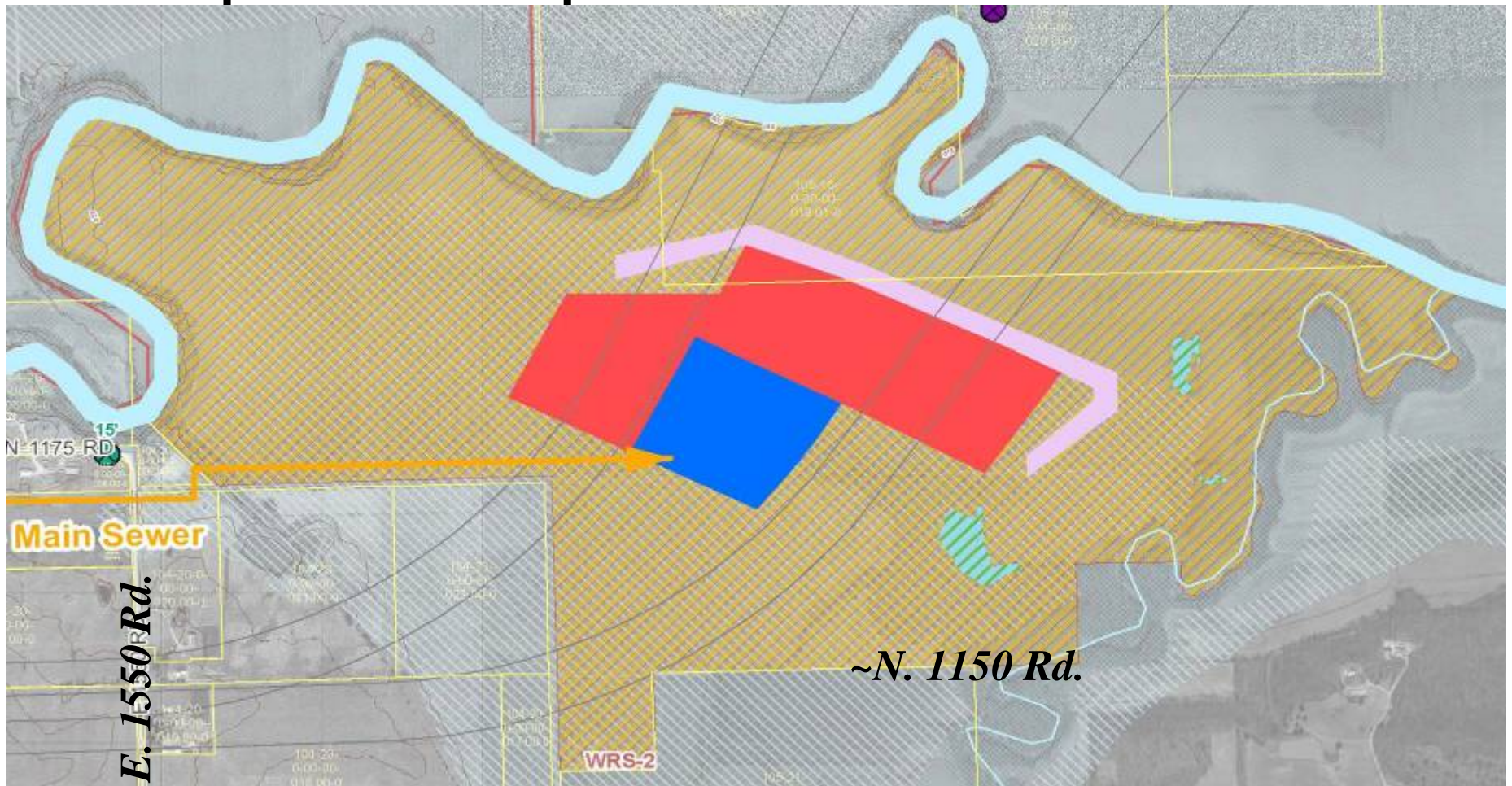
Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Site Acquisition Completed



BLACK & VEATCH

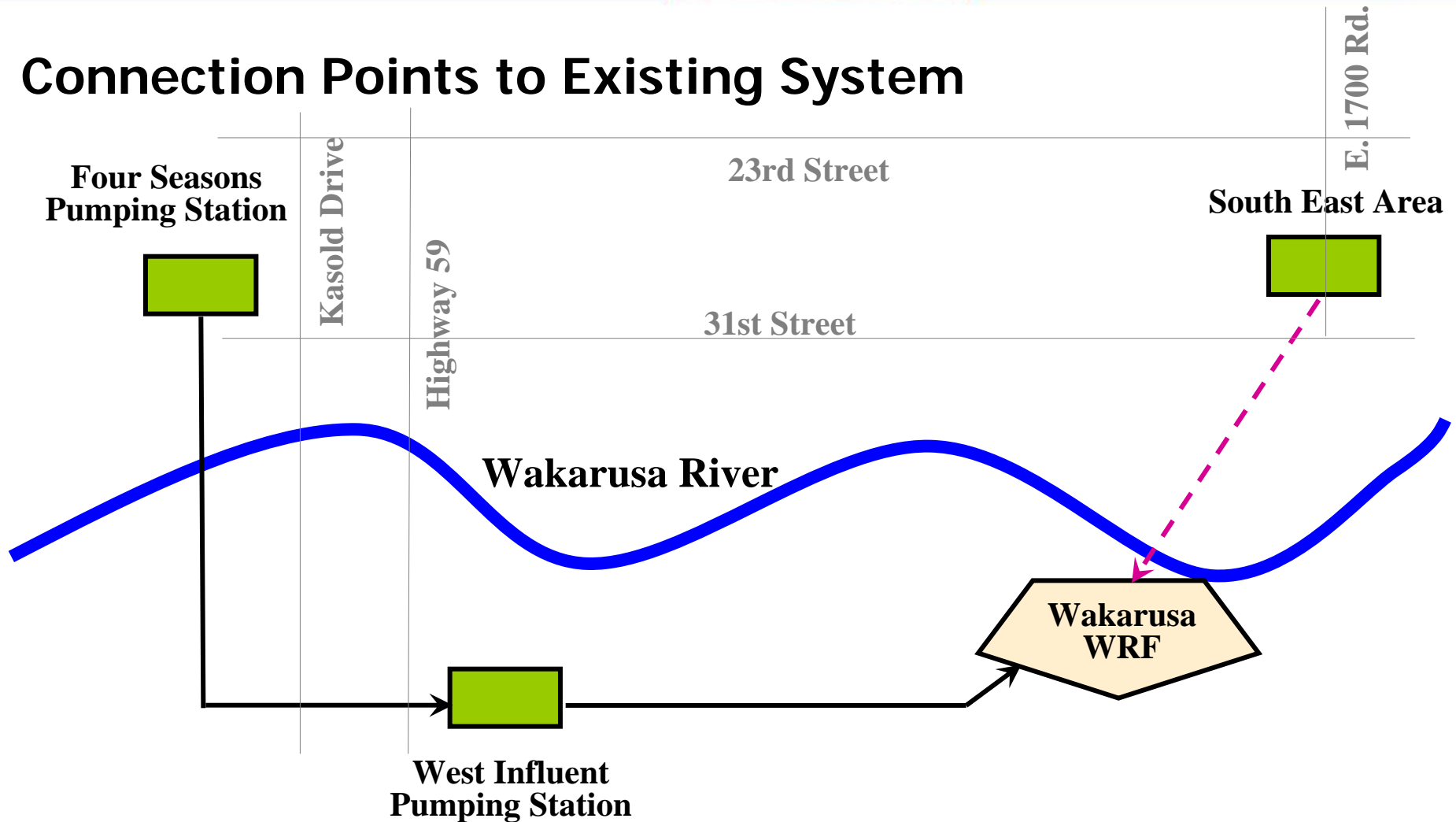
Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
www.lawrenceutilities.org/wwrf

## Connection Points to Existing System



BLACK & VEATCH

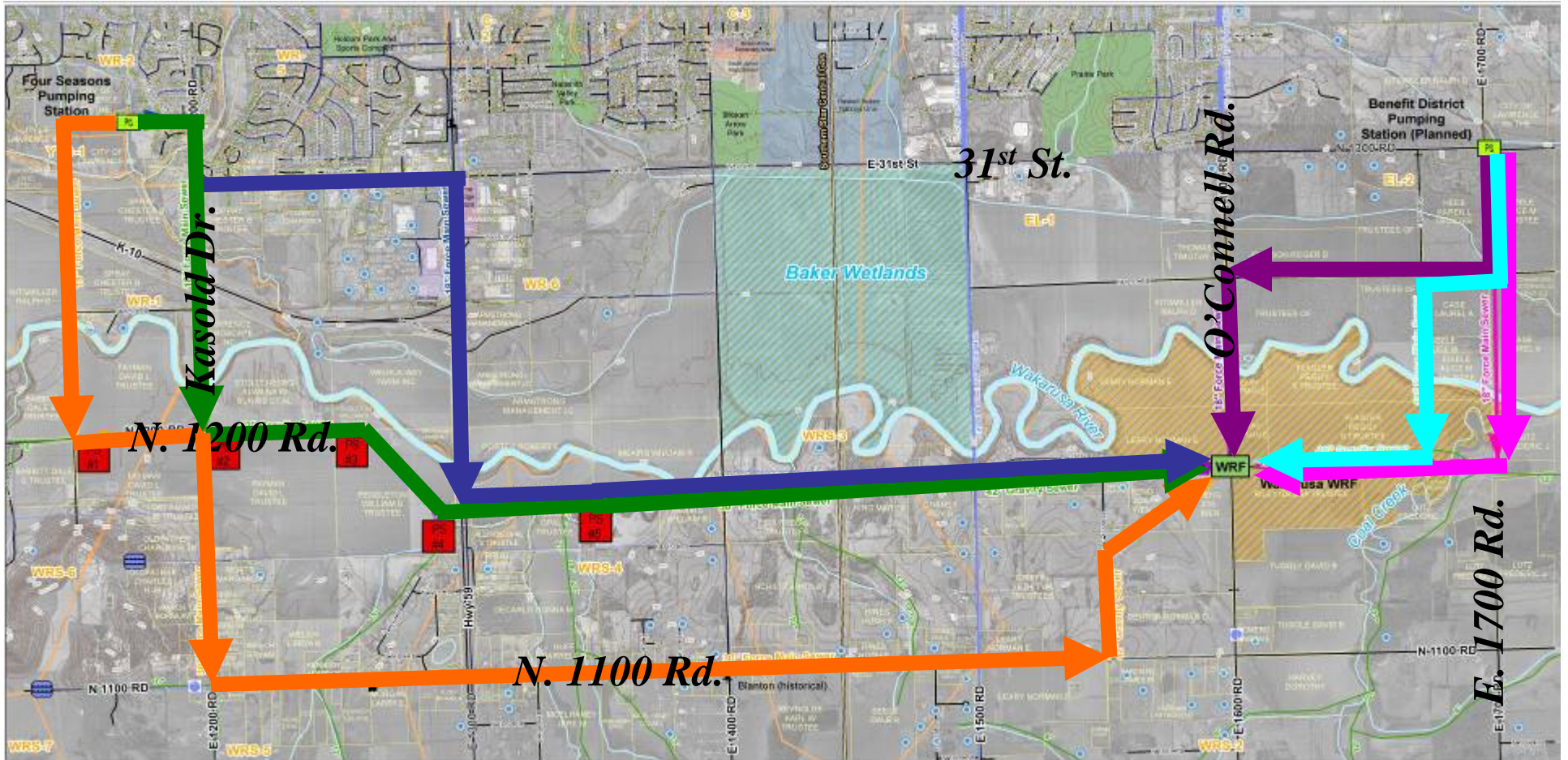
Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
www.lawrenceutilities.org/wwf

## Ways to get from Point A to Point B



BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Steps to Selection of Proposed Alternative

- Aerial survey
- Avoid or minimize disruptions to existing surface features
- Make use of available topography
- Consider potential future development
- Costs

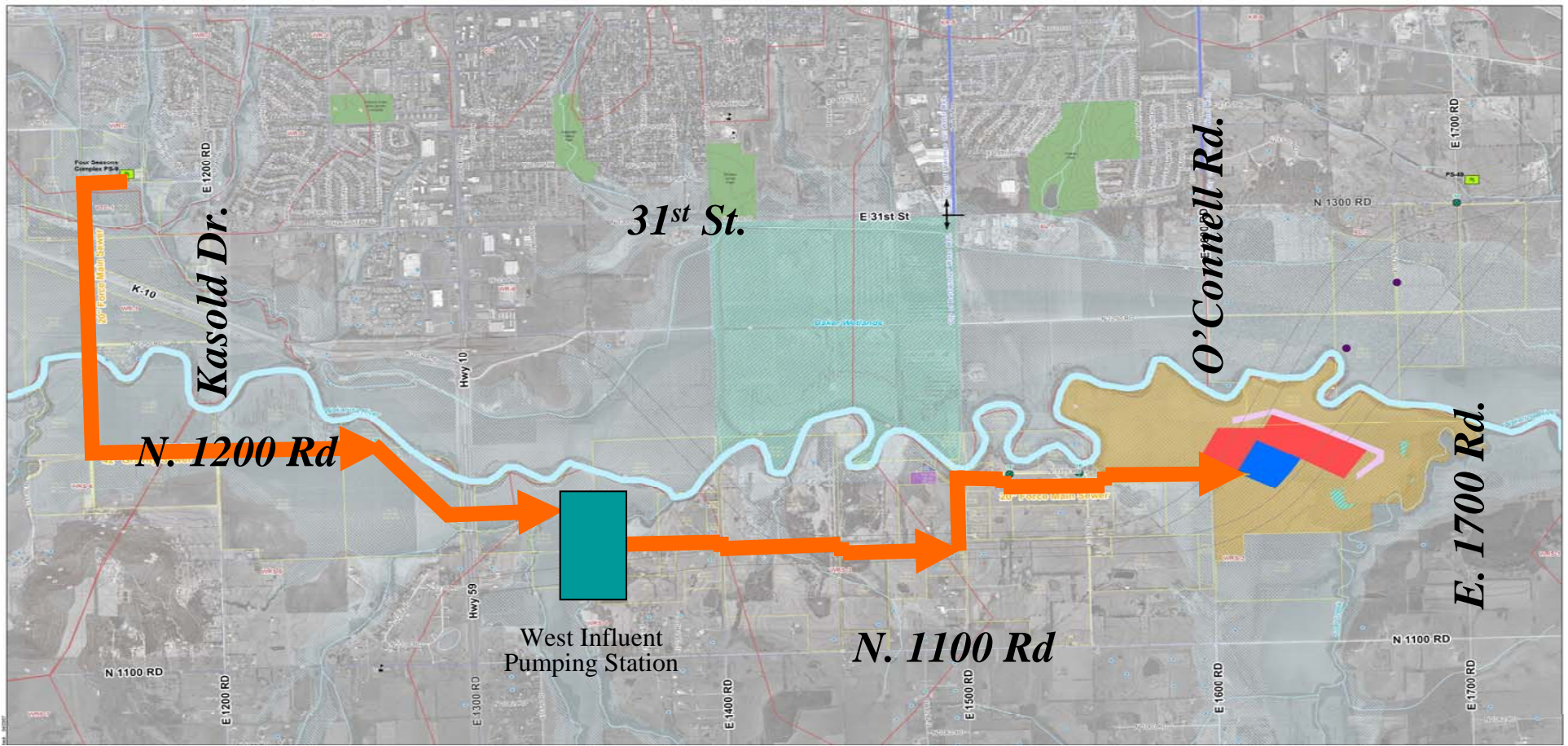
Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Proposed Conveyance Corridor



BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Benefits of Proposed Alignment

- Follows road right-of-ways where feasible
- Desire to be close to river
- Minimize number of property owners impacted
- More cost effective
  - Fit with topography
  - Seeks to balance length of pipeline with impact to individual properties

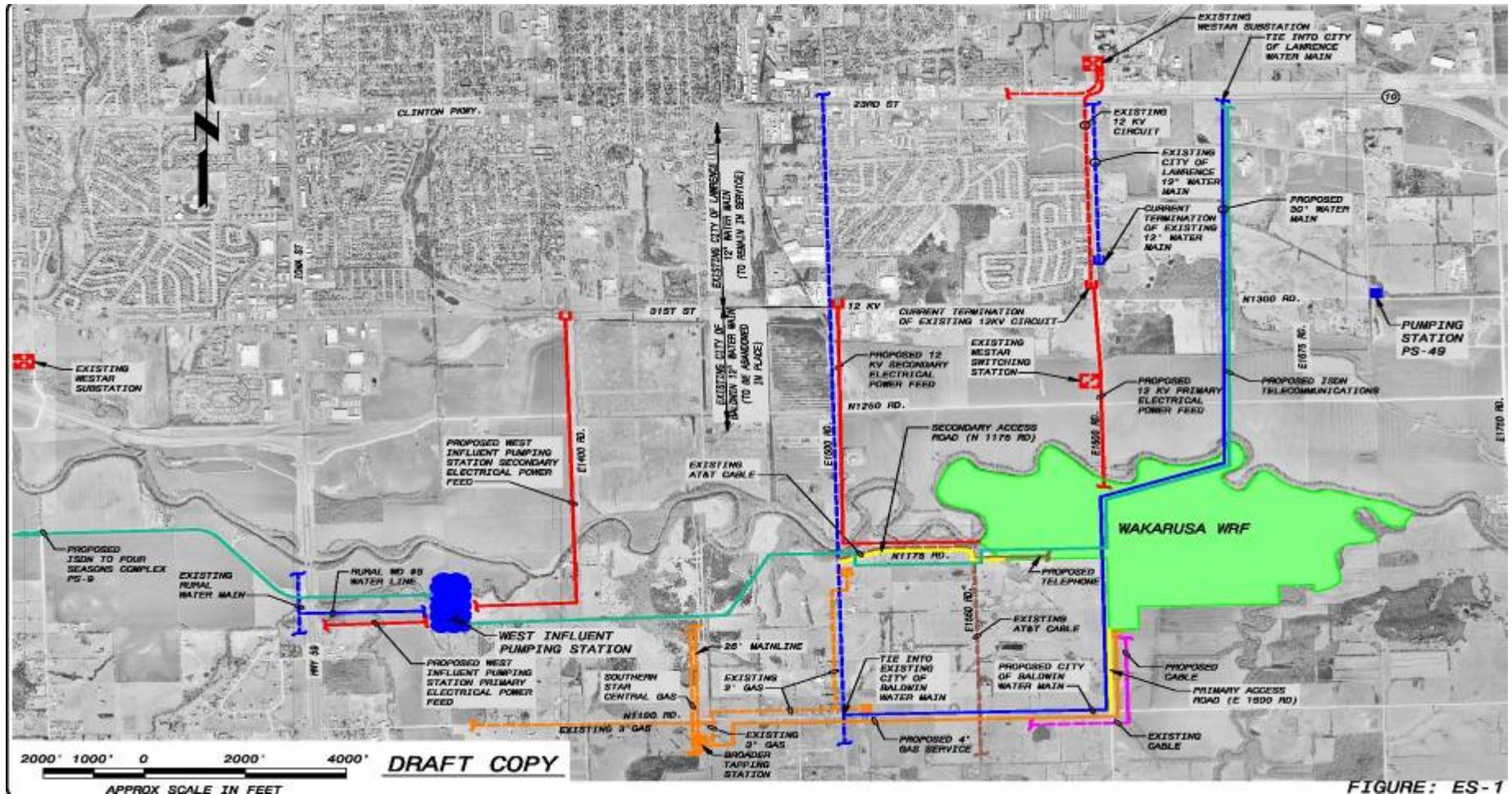
Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
www.lawrenceutilities.org/wwr

# Proposed Utility Corridors



BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## What to Expect in the Future...

*Example Piping Corridors...Before and During Construction*



BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## What to Expect in the Future...

*Example Piping Corridors...After Construction*



BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## What to Expect in the Future...

*Example Piping Corridors...Before and During Construction*



**BLACK & VEATCH**

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## What to Expect in the Future...

*Example Piping Corridors...After Construction*



BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
www.lawrenceutilities.org/wwrf

## What to Expect in the Future...

### *Pumping Station Options*



*North Lawrence*



*Topeka, KS*



*Planned  
Baldwin Creek, Lawrence  
(N. 1750 Rd and E. 1100 Rd)*

BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Current Activities for Corridor Selection

- Notified land owners in general vicinity
- Notified specific land owners impacted
- Negotiating site access for onsite investigations

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Next Steps

- Complete onsite investigations and incorporate findings
  - Geotechnical and survey
  - Cultural and historic investigation
  - Threatened and endangered species
  - Wetlands delineation
  - Environmental contamination (Phase I)
- Four Seasons Pumping Station Meeting
  - [Monday, May 21, 7 pm, Holcom Park Recreational Facility](#)
- Review proposed corridor alignment with City Commission
  - [To be scheduled](#)
- Public Meeting No. 6

BLACK & VEATCH

Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

# Questions?

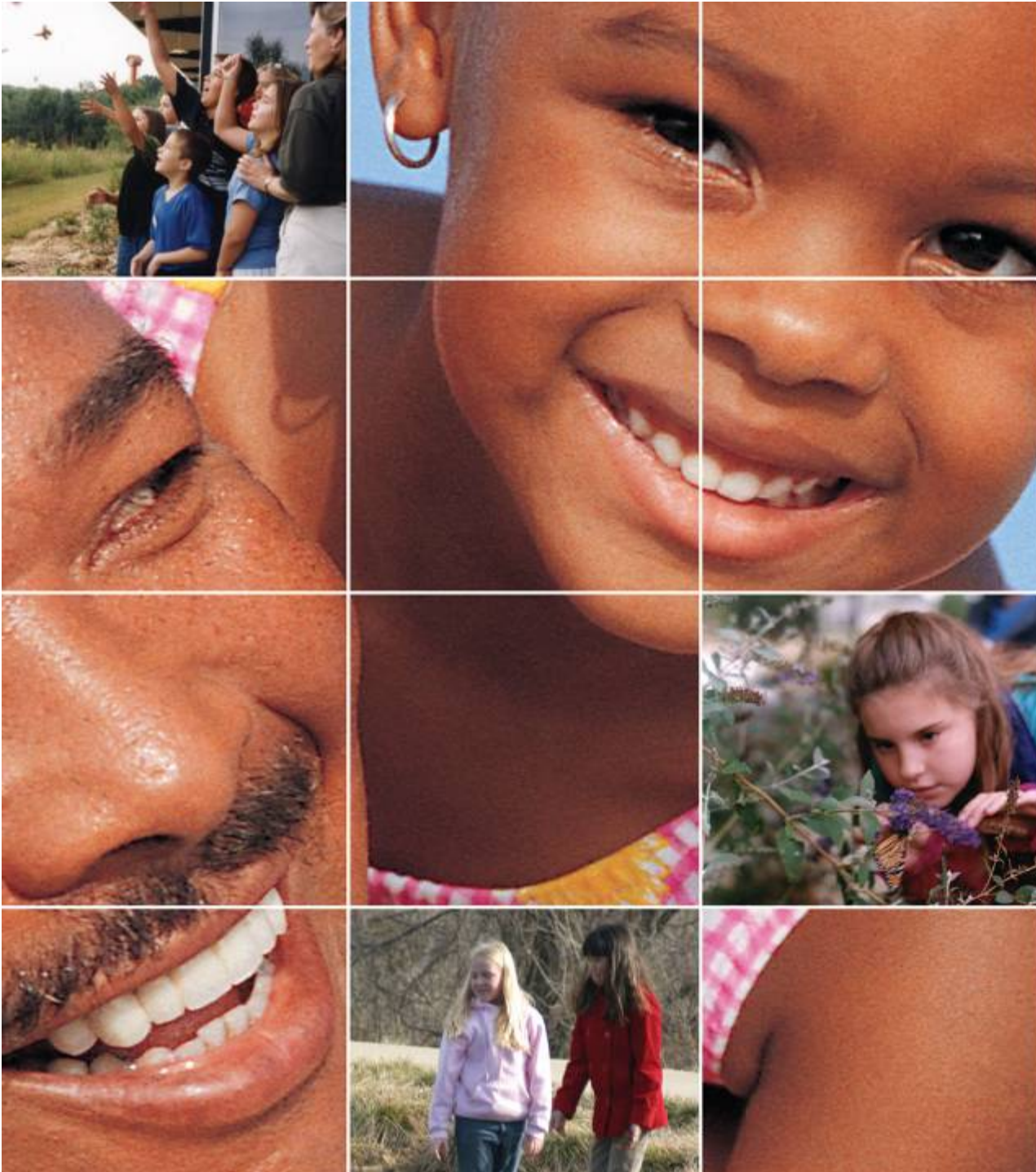
Leading the way...

...it's what we do.



Wakarusa Water Reclamation Facility  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

## Open House



Serving the  
community,  
into the future...

**Thank you for  
attending!!**

...it's what we do.



**Wakarusa Water Reclamation Facility**  
[www.lawrenceutilities.org/wwrf](http://www.lawrenceutilities.org/wwrf)

**BLACK & VEATCH**

[weknowwater@bv.com](mailto:weknowwater@bv.com)