



Tackling Litter & Recycling Contamination

Technology Tools for Parks & Outdoor Public Spaces

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Morgan Turner

GBB Senior Project Manager
TRUE Zero Waste Advisor
She/Her/Hers

"I am committed to creating healthy, resilient communities and organizations through the development and implementation of actionable zero waste strategies and policies."


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Our Story


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GBB is an international solid waste management consulting firm that helps public- and private-sector organizations craft practical, customized and technically sound solutions for complex solid waste management challenges.

Since 1980, GBB has been a trusted resource at the forefront of the industry, creating success stories that integrate smart planning with effective management of solid waste services. Our staff enables our clients to do more with less.



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Our Mission

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We help our clients solve solid waste management issues by providing **innovative, responsible, sustainable, and economical** strategies and solutions for the benefit of communities and the environment.


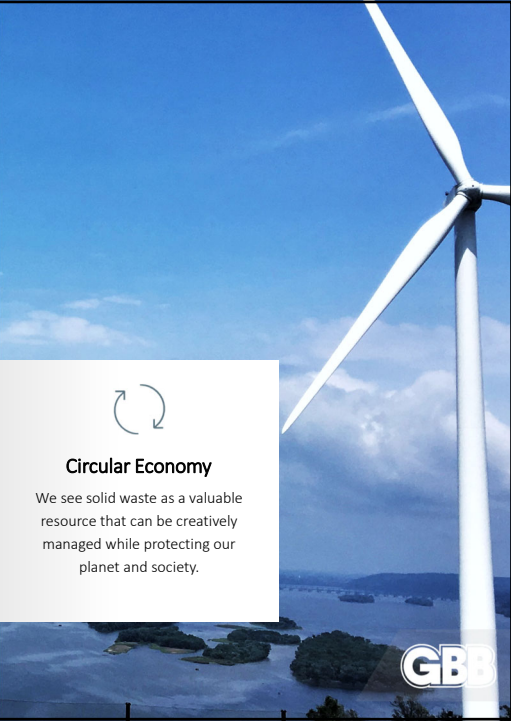
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Our Vision

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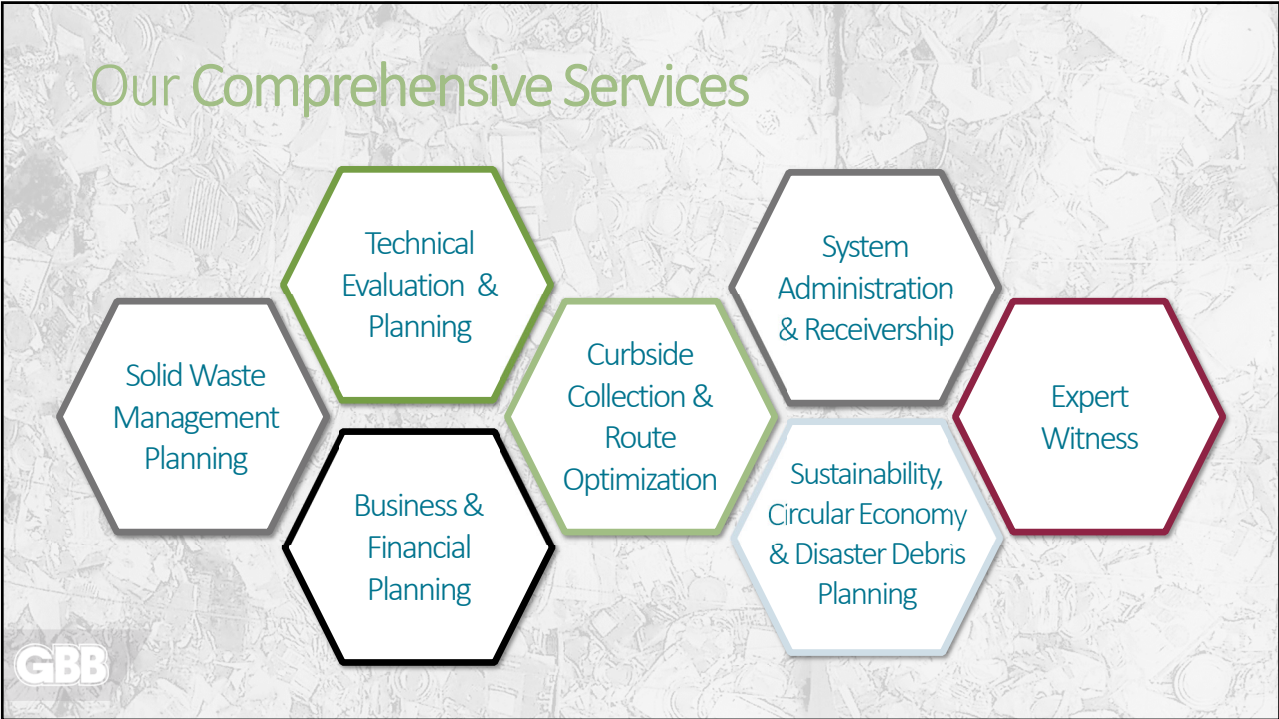
We believe in a world where discarded materials are used as resources rather than wasted – for the benefit of communities and the environment.

 Communities We are guided by our principles of quality, value, ethics, and results to help communities of all shapes and sizes.	 Environment We believe effective management of solid waste is an imperative that directly affects our planet- both today and far into the future.	 Circular Economy We see solid waste as a valuable resource that can be creatively managed while protecting our planet and society.
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Our Comprehensive Services



- Solid Waste Management Planning
- Technical Evaluation & Planning
- Business & Financial Planning
- Curbside Collection & Route Optimization
- System Administration & Receivership
- Sustainability, Circular Economy & Disaster Debris Planning
- Expert Witness



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Foresight & Strategy

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- Parks and Public Spaces
 - Limited resources
 - Local factors
- Changes Ahead to Consider
 - Social
 - Technological
 - Environmental
 - Economic
 - Political

Technology Trends for 2022

- AI
- 5G
- IoT
- Cloud Computing
- Metaverse
- Blockchain
- Cyber Security

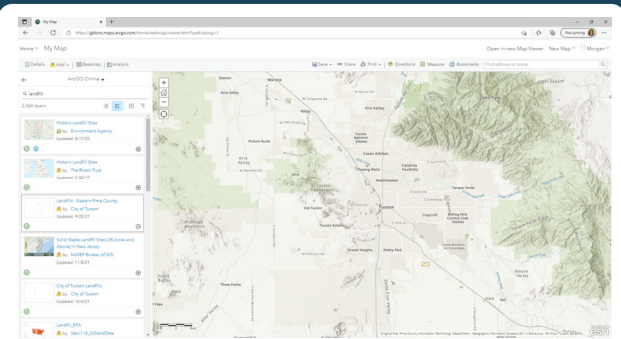
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Tool 1: GIS

Software and system to visualize/analyze geographic data (Location of features)

Planning bin placement patterns

- Estimate walksheds
- Geolocate infrastructure assets and litter
- Confirm colocation of bins
- Evaluate proximity to key locations
- Reduce redundancy
- Adjust service areas
- Differentiate waste sort data by location



Future

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AI

Apply weather patterns,
attendance trends

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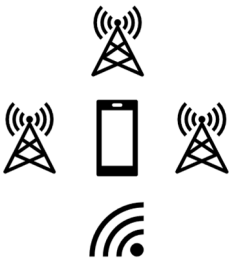
Tool 2: Cell Phone Data

Datasets of mobile device movements used to:

- ✓ Build profiles
- ✓ Understand patterns
- ✓ Make prediction about future

Designing signage and planning bin placement patterns

- Analyze data for specific boundary
- Understand visitor
- Inform messaging
- Leverage demographics (age, language, point of origin)
- Adjust containers & service based on:
 - Visit durations
 - Key time periods





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Tool 3: QR Codes

Link to content easily read by digital devices

Designing signage and planning bin placement patterns



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Continuous Improvement and Resiliency

 <p>Can use technology tools to design & improve programs</p>	 <p>Pair with behavioral (social) understanding</p>	 <p>Positively influence how waste is discarded</p>
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Questions & Answers

POWERED BY BUSCH SYSTEMS

GREEN THINKING

Webinar Series

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Thank You!



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