

CITY COUNCIL REPORT



Meeting Date: August 31, 2015
 General Plan Element: ***Preservation and Environmental Planning***
 General Plan Goal: ***Achieve a sustainable balance between the conservation, use and development of Scottsdale's natural resources.***

ACTION

Intergovernmental Agreement with Arizona State University for Green Organics Program. Adopt Resolution 10215 authorizing Agreement 2015-198-COS between the City of Scottsdale and Arizona State University for project development in the reduction of green organics in landfills and the creation of development opportunities for utilizing organic feedstock through regional cooperation with other municipalities.

BACKGROUND

Green organics, primarily leaves and grass, branches and trimmings, represents approximately 30% of the total waste collected in the residential trash bin from municipalities in the Phoenix Metropolitan Area (PMA).

The majority of this material ends up in the landfill where green organics represent both an opportunity cost as a potential market revenue stream for the municipality, and as a major contributor to landfill generated methane emissions.

For this project, green organics will include:

- Residential and commercial yard waste including leaves and grass, branches and trimmings, oleanders and palm fronds
- Horse and cow manure
- Waste Water Treatment Plant (WWTP) sludge
- Fats, Oil, Grease (FOG)
- Other feedstock such as wood waste, dairy waste, brewery waste and other industrial byproducts will be included based on industry participation.

The primary goals of this project between the City and ASU will be:

1. Develop a system design that identifies economic development opportunities to optimize the value of green organic feedstock through regionalization.

2. Create a platform for feedstock utilization and regionalization that will encourage municipalities to collaborate on other waste feedstocks.
3. Design a platform for collaborative decision making among the municipalities that includes the benefits of shared value.

The portion of the total cost to be paid to ASU by the City (Scottsdale Solid Waste Services) for the ASU Services for this agreement will be \$16,000.00.

The regional project is segmented into two phases:

- 1) A current assessment of region wide green organics; and
- 2) The green organics system design.

Funding is segmented for the phases at \$100,000.00 and \$200,000.00, respectively. ASU and City of Phoenix have committed to provide half the required funding. The remainder will be split among eight or more other municipalities. The parties understand and agree that as a condition precedent to ASU performing the Services set forth in the Agreement and in this exhibit (including the ASU Services), ASU must have signed contracts or other acceptable commitments for project funding totaling at least \$100,000.00, and \$200,000.00, respectively, from collaborative parties, for the two phases.

Notwithstanding the foregoing, in the event that the funding requirements for the phases set forth are not met, and the project cannot be re-budgeted to meet the expected deliverables, ASU will issue City a refund of amounts paid under this Agreement as follows:

- 1) If the Phase 1 funding requirement of \$100,000 is not met, ASU will refund City the full payment of \$16,000;
- 2) If the Phase 2 funding requirement of \$200,000 is not met, ASU will refund one-half of the City payment, the amount of \$8,000.

ANALYSIS & ASSESSMENT

Recent Staff Action

Solid Waste Management staff met with Arizona State University and public agencies at a regional meeting to discuss circular economy concepts and the Regional Green Organics System Design Project.

Policy Implications

The rising economic costs of transportation, handling and tipping fees, along with the associated environmental costs have solid waste managers searching for alternatives that will reduce expenditures and extract value from the green organics feedstock.

Community Involvement

Beginning September 2015, a variety of opportunities will be available to the public to gain

information on the project and provide input.

RESOURCE IMPACTS

Available funding

The cost for this contract is included in the current year budget.

Staffing, Workload Impact

During the term of the Agreement, City Solid Waste Services staff will regularly meet and coordinate with ASU and will perform the services and other obligations identified as being the responsibility of the City in the agreement. The contract administrator for this agreement will be Frank Moreno, Department Director, Solid Waste Management.

OPTIONS & STAFF RECOMMENDATION

Recommended Approach

Adopt Resolution 10215 authorizing Agreement 2015-198-COS between the City of Scottsdale and Arizona State University for project development in the reduction of green organics in landfills and the creation of development opportunities for utilizing organic feedstock through regional cooperation with other municipalities.

Proposed Next Steps:

Upon approval by Council, Solid Waste Management staff will participate in the continuation of organics research and regional collaborations including compost research and local application techniques.

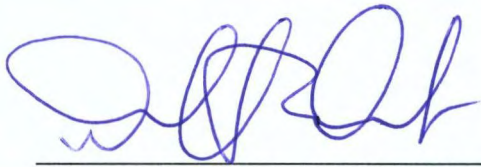
RESPONSIBLE DEPARTMENT(S)

Public Works Division, Solid Waste Management

STAFF CONTACTS (S)

Frank Moreno, Solid Waste Management Director, FMoreno@scottsdaleaz.gov (480) 312-5605

APPROVED BY



Daniel J. Worth, Director, Public Works

(480) 312-5555, dworth@scottsdaleaz.gov

8-18-15

Date

ATTACHMENTS

1. Resolution 10215
2. Contract 2015-198-COS

RESOLUTION NO. 10215

A RESOLUTION OF THE COUNCIL OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, APPROVING AND AUTHORIZING THE MAYOR TO EXECUTE INTERGOVERNMENTAL AGREEMENT NO. 2015-198-COS BETWEEN THE CITY OF SCOTTSDALE AND ARIZONA STATE UNIVERSITY FOR A REGIONAL EFFORT TO REDUCE GREEN ORGANICS IN LANDFILLS AND TO CREATE DEVELOPMENT OPPORTUNITIES FOR ORGANIC FEEDSTOCK

The City and Arizona State University share a common interest in advancing sustainability initiatives, increasing energy efficiency, reducing harmful emissions and waste, and finding innovative solutions to Arizona's environmental and economic challenges to better serve the State and its communities; and

The Arizona Revised Statutes ("A.R.S."), §§ 11-951 through 11-954, provide that public agencies may enter into intergovernmental agreements for joint or cooperative action; and

The parties desire to collaborate in a regional effort to share their expertise, knowledge, and resources so as to analyze and address various sustainability challenges to reducing deliveries of green organic material to landfills;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Scottsdale as follows:

Section 1. The Mayor of the City of Scottsdale is authorized and directed to execute Intergovernmental Agreement No. 2015-198-COS between the City of Scottsdale and Arizona State University for project development in the reduction of green organics in landfills and the creation of development opportunities for organic feedstock through regional cooperation.

PASSED AND ADOPTED by the Council of the City of Scottsdale this 31st day of August, 2015.

ATTEST:

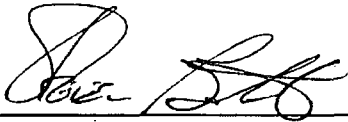
CITY OF SCOTTSDALE, an
Arizona municipal corporation

By: _____
Carolyn Jagger, City Clerk

By: _____
W.J. "Jim" Lane, Mayor

Resolution No. 10215
August 31, 2015

APPROVED AS TO FORM:

Two handwritten signatures in black ink. The first signature is on the left, and the second is on the right, both written over a horizontal line.

Bruce Washburn, City Attorney
By: Steven Bennett
Deputy City Attorney

**ARIZONA STATE UNIVERSITY
AND
CITY OF SCOTTSDALE SOLID WASTE SERVICES
INTERGOVERNMENTAL AGREEMENT**

This Intergovernmental Agreement ("Agreement") is entered into this ____ day of _____, 2015 (the "Effective Date") by and between the City of Scottsdale, a municipal corporation duly organized and existing under the laws of the State of Arizona and having its principal place of business at 3939 N. Drinkwater Blvd., Scottsdale, AZ 85251 ("City"), and The Arizona Board of Regents for and on behalf of Arizona State University and its Rob and Melani Walton Sustainability Solutions Initiatives having its place of business at 21 E. 6th Street, Suite 126C, Tempe, AZ 85281 ("ASU").

RECITALS

A. The parties share a common interest in advancing sustainability initiatives, increasing energy efficiency, reducing harmful emissions and waste, and finding innovative solutions to Arizona's environmental and economic challenges to better serve the State and its communities.

B. Arizona Revised Statutes ("A.R.S."), §§ 11-951 through 11-954, provide that public agencies may enter into intergovernmental agreements for the provision of services or for joint or cooperative action.

C. Accordingly, the parties desire to enter into this Agreement, which provides for a collaboration in which the parties share their expertise, knowledge, and resources (as provided for in this Agreement) with one another to analyze and address various sustainability challenges, as set forth in Exhibit A hereto which is incorporated herein by this reference. The services to be provided under this Agreement include a wide array of research, development, education, and solution services to more effectively manage resources and create economic value.

D. City is authorized to enter into this Agreement pursuant to City of Scottsdale Charter, Article 1, Sec. 3-1.

E. ASU is empowered by A.R.S. §§15-1625, *et seq.*, to enter into this Agreement and has delegated to the undersigned the authority to execute this Agreement on behalf of ASU.

F. The ASU Services (as defined below) are consistent, compatible, and beneficial to the role and mission of ASU to provide educational experiences for students and to encourage and support research and related educational activities.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree as follows:

ATTACHMENT 2

1. **SCOPE OF ASU SERVICES.**

- a. During the term of the Agreement, ASU will regularly meet and coordinate with City and will use reasonable efforts to perform the services and other obligations identified as being the responsibility of ASU in Exhibit A ("ASU Services").
- b. The ASU Services will be provided under the direction and supervision of the ASU contact named herein. The parties agree that ASU will have discretion to involve its students in the conduct and performance of the ASU Services.
- c. ASU will provide regular progress reports to City in a form mutually agreeable to the parties.
- d. ASU represents and certifies to City that:
 - i. It has the experience, expertise, personnel, and financial resources to perform the ASU Services;
 - ii. It is familiar with the nature and extent of this Agreement, the ASU Services, and any conditions that may reasonably and materially affect its performance under this Agreement;
 - iii. To its knowledge, there is no litigation or claim made against ASU that would adversely affect its performance under this Agreement.
- e. The ASU Services may be supplemented with additional detail and/or responsibilities from time to time during the term of this Agreement by mutual written agreement amending Exhibit A.

2. **SCOPE OF CITY RESPONSIBILITIES.**

- a. During the term of the Agreement, City will regularly meet and coordinate with ASU and will perform the services and other obligations identified as being the responsibility of City in Exhibit A ("City Responsibilities").
- b. Payment.
 - i. The total cost of the project is \$300,000.00, which will be collaboratively funded by a variety of municipalities and possibly other agencies. The portion of the total cost to be paid to ASU by the City (Scottsdale Solid Waste Services) for the ASU Services is \$16,000.00.
 - ii. City shall remit the total contract price (\$16,000.00) upon receipt of an invoice from ASU after July 1, 2015. Invoices are due and payable within 30 days. Questions regarding invoices should be directed to the person identified in Section 5 below. ASU will mail invoices to the City contact identified. Invoices not paid within thirty (30) days will be subject to a late fee of 1.5% per month until paid in full.

- iii. The project is segmented into two phases, 1) a current assessment of region-wide green organics and 2) the green organics system design. Funding is segmented for the phases at \$100,000.00 and \$200,000.00, respectively. The parties understand and agree that as a condition precedent to ASU performing the Services set forth in the Agreement and in this exhibit (including the ASU Services), ASU must have signed contracts or other acceptable commitments for project funding totaling at least \$100,000.00, and \$200,000.00, respectively, from collaborative parties, for the two phases.
 - iv. The parties agree that in the event that the funding requirements for the phases set forth in Section 2.b.iii above are not met, ASU will be relieved of all of its obligations for under this Agreement for the phase(s) which is/are underfunded, including the performance of the ASU Services for the phase(s). ASU will not begin work or expend funds for the phase(s) until commitments are received in the amount required for the phase(s).
 - v. Notwithstanding the foregoing, in the event that the funding requirements for the phases set forth in Section 2.b.iii above are not met and the project cannot be re-budgeted to meet the expected deliverables, ASU will issue City a refund of amounts paid under this Agreement as follows: 1) if the Phase 1 funding requirement of \$100,000 is not met, ASU will refund City the full payment of \$16,000; 2) if the Phase 2 funding requirement of \$200,000 is not met, ASU will refund one-half of the City payment, the amount of \$8,000.
 - vi. City acknowledges and agrees that ASU's rates are subject to change from time to time but that rates set forth on Exhibit A will not change while work thereunder is in progress.
 - vii. In the event of non-payment, ASU may terminate this Agreement and stop all further work on the ASU Services and may seek full payment of City's portion of all work performed and all expenses incurred including allocable costs. Should it become necessary for ASU to commence collection proceedings or retain an attorney to enforce any of the terms of this Agreement, City will pay all attorneys' fees and the costs of collection incurred by ASU.
- c. The parties also understand and agree that as a condition precedent to ASU performing the ASU Services, City must provide access to information in the form of data from databases, existing agreements and contracts, surveys and plans relating to the management of green organics waste. The parties agree that in the event City fails to provide this information, ASU will be relieved of all of its obligations under this Agreement, including the performance of the ASU Services.
 - d. The City Responsibilities may be supplemented with additional detail and/or responsibilities from time to time during the term of this Agreement by mutual written agreement amending Exhibit A.

3. **TERM OF AGREEMENT.**

- a. This Agreement shall commence on the "Effective Date" and shall expire upon the earlier of the completion of the ASU Services or two years from the Effective Date.
- b. Scheduling Services. The scheduling of the ASU Services will be arranged to avoid conflict with ASU's educational and research programs. ASU will control the scheduling of such services but will use reasonable efforts to meet the timelines established by City.

4. **TERMINATION.**

- a. Either party may terminate this Agreement at any time by giving the other party not less than thirty (30) days prior written notice. If this Agreement is terminated by City, City will remain responsible for any unpaid City payment due to ASU for ASU Services performed through the date of termination. Upon termination, property purchased in furtherance of this Agreement will remain the property of the purchasing party, unless expressly specified otherwise.
- b. Termination for Default. In the event that either party fails to perform any material obligation required by this Agreement, the non-breaching party may terminate this Agreement upon seven (7) days written notice. Notwithstanding the foregoing, no termination for default will occur if, after receiving notice of the breach, the breaching party adequately cures the breach or commences reasonable efforts in a diligent and continuous manner to cure the breach.
- c. No failure or delay by any party in asserting any of its rights or remedies as to any default will operate as a waiver of any default, or of such rights or remedies, or deprive either such party of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce any such rights or remedies.

5. **NOTICES.**

- a. All notices, demands or other communications provided for or required in this Agreement will be deemed to have been fully given, made, or sent when made in writing and personally delivered or received by United State postpaid registered or certified mail and addressed as follows:

ASU:
Attention: Dan O'Neill
Arizona State University
P.O. Box 878009
Tempe, Arizona 85287-8009
Fax: (480) 965-5533
Phone: (480) 727-2704

City of Scottsdale Solid Waste Services:
Attention: Frank Moreno
9191 San Salvador Dr.
Scottsdale, AZ 85258
Phone: (480) 312-5605

ASU Payment Address:
Attention: Heather Irish
Arizona State University
Julie Ann Wrigley Global Institute of Sustainability
P.O. Box 878009
Tempe, Arizona 85287-8009
Phone: (480) 727-4071

The address to which any notice, demand, or other writing may be given, made, or sent to any party may be changed by written notice given by the party.

6. **NO WARRANTY.** ASU neither makes nor will be deemed to have made any representation or warranty whatsoever (express or implied) regarding any outcome obtained or deliverable delivered hereunder including any outcome desired by City. Any decision regarding safety, applicability, marketability, effectiveness for any purpose, or other use or disposition of said outcome will be the sole responsibility of City and/or its assigns and licensees.
7. **NO UNIVERSITY ENDORSEMENTS.** In no event will City (or its successors, employees, agents and contractors) state or imply in any publication, advertisement or other medium that ASU has approved, endorsed or tested any product or service. In no event will ASU's performance of any of the ASU Services hereunder be considered a test of the effectiveness or the basis for any endorsement of a product or service.
8. **USE OF NAMES OR LOGOS.** Neither party will use any names, service marks, trademarks, trade names, logos or other identifying names, domain names or identifying marks of the other party ("Marks"), or the name of any representative or employee of the other party in any sales promotion work or advertising, or any form of publicity, without the prior written permission of the party that owns the Marks in each instance. Use of any party's Marks must comply with the owning party's requirements, including using the "®" indication of a registered trademark where applicable.
9. **SIMILAR RESEARCH; PUBLICATIONS.** Nothing in this Agreement will be construed to limit the freedom of ASU or of its researchers who are not participants under this Agreement from engaging in similar services made under other grants, contracts or agreements with parties other than City.

City recognizes that under ASU policy, the results of work performed under this Agreement must be publishable. City agrees that ASU and its employees and students engaged in work under this Agreement will be free to present and/or publish the results and methods of such work at symposia, professional meetings and other venues, and in journals, theses, dissertations and other documents of their own choosing. Upon written request by City, ASU will furnish copies of proposed manuscripts to City for review prior to publication. If City determines that confidential or proprietary information is inadvertently disclosed in the proposed manuscript, City will notify ASU. In no event will ASU delay publication for more than thirty (30) days from receipt by City of such manuscript for review.

10. **EXPORT CONTROLS.** City will notify ASU in writing if any technological information or data provided to ASU under this Agreement is subject to export controls under U.S. law or if

technological information or data that City is requesting ASU to produce during the course of work under this Agreement is expected to be subject to such controls. City will notify ASU of the applicable export controls (for example, Commerce Control List designations, reasons for control, countries for which an export license is required). ASU will have the right to decline export controlled information or tasks requiring production of such information.

11. **INDEPENDENT CONTRACTOR.** Each party is an independent contractor and is independent of the other party. Under no circumstances will any employees of one party be deemed the employees of the other party for any purpose. This Agreement does not create a partnership, joint venture or agency relationship between the parties of any kind or nature. This Agreement does not create any fiduciary or other obligation between the parties, except for those obligations expressly and specifically set forth herein. Neither party will have any right, power, or authority under this Agreement to act as a legal representative of the other party, and neither party will have any power to obligate or bind the other or to make any representations, express or implied, on behalf of or in the name of the other in any manner or for any purpose whatsoever contrary to the provisions of this Agreement. Each party acknowledges that the relationship of the parties hereunder is non-exclusive.
12. **FORCE MAJEURE.**
 - a. No liability will result from the delay in performance or nonperformance caused by force majeure or circumstances beyond the reasonable control of the party affected, including, but not limited to, acts of God, fire, flood, substantial snowstorm, war, terrorism, embargo, any United States or foreign government regulation, direction or request, accident, strike or other labor dispute or labor trouble, or any failure or delay of any transportation, power or communications system or any other or similar cause beyond that party's reasonable control.
 - b. The party which is so prevented from performing will give prompt notice to the other party of the occurrence of such event of force majeure, the expected duration of such condition and the steps which it is taking to correct such condition. This Agreement may be terminated by either party by written notice upon the occurrence of such event of force majeure which results in a delay of performance hereunder exceeding thirty (30) days.
13. **APPLICABLE LAW.** Any dispute regarding or arising under this Agreement, or the interpretation of this Agreement, will be subject to and resolved in accordance with the laws of the State of Arizona, without regard to its conflicts of laws principles.
14. **DISPUTE RESOLUTION.** In the event of any dispute, claim, question, or disagreement arising from or relating to this Agreement or the breach thereof, the parties hereto will use their reasonable efforts to settle the dispute, claim, question, or disagreement. To this effect, they will consult and negotiate with each other in good faith and, recognizing their mutual interests, attempt to reach a just and equitable solution satisfactory to both parties. In the event of litigation, as required by Arizona Revised Statutes ("A.R.S.") §12-1518, the parties agree to make use of arbitration in all contracts that are subject to mandatory arbitration pursuant to rules adopted under A.R.S. §12-133.

15. **ASSIGNMENT.** Neither party will assign or transfer any interest in this Agreement without the prior written approval of the other party. Any attempted assignment in violation of this provision will be null and void. Subject to the foregoing, this Agreement will be binding upon the permitted successors and permitted assigns or other permitted transferees of the parties.
16. **RECITALS AND EXHIBITS.** All recitals herein, and all exhibits attached hereto (including each Scope of Work hereunder) and referred to herein, are integral and material parts of this Agreement.
17. **SEVERABILITY.** If any provision of this Agreement shall for any reason be found invalid, illegal, unenforceable, or in conflict with any valid controlling law: (a) such provision will be separated from this Agreement; (b) such invalidity, illegality, unenforceability, or conflict will not affect any other provision hereof; and (c) this Agreement will be interpreted and construed as if such provision, to the extent the same shall have been held invalid, illegal, unenforceable, or in conflict, had never been contained herein.
18. **WAIVER.** The waiver of a breach hereunder may be effected only by a writing signed by the waiving party and will not constitute, or be held to be, a waiver of any other or subsequent breach or to affect in any way the effectiveness or enforceability of the provision in question.
19. **MODIFICATION.** Any modification or amendment of this Agreement or any Scope of Work hereunder will be effective only if made in writing and signed by both parties.
20. **NO THIRD PARTY BENEFICIARIES.** Nothing in this Agreement, express or implied, is intended or will be construed to confer upon any person or entity, other than the parties and their respective successors and assigns permitted by this Agreement, any right, remedy or claim under or by reason of this Agreement.
21. **MERGER AND INTEGRATION.** This Agreement contains the entire understanding between the parties concerning the subject matter of this Agreement and supersedes any and all prior understandings, agreements, representations, and warranties, express or implied, written or oral, between the parties concerning the subject matter of this Agreement.
22. **NONDISCRIMINATION.** The parties will comply with all applicable state and federal laws, rules, regulations, and executive orders governing equal employment opportunity, immigration, and nondiscrimination, including the Americans with Disabilities Act. If applicable, the parties will abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

23. **CONFLICT OF INTEREST.** Each party's participation in this Agreement is subject to A.R.S. § 38-511 which provides that this Agreement may be cancelled if any person significantly involved in initiating, negotiating, securing, drafting or creating this Agreement on behalf of ASU or City is, at any time while this Agreement or any extension thereof is in effect, an employee or agent of the other party to this Agreement in any capacity or a consultant to any other party with respect to the subject matter of this Agreement.
24. **FAILURE OF LEGISLATURE TO APPROPRIATE.** In accordance with A.R.S. § 35-154, if either party's performance under this Agreement depends upon the appropriation of funds by the Arizona Legislature or by the Scottsdale City Council, and if the Legislature or City Council fails to appropriate the funds necessary for performance, then the affected party may provide written notice of this to the other party and cancel this Agreement without further obligation.

The parties agree that Sections 26, 27, 28 and 29 will apply in the event City and its employees are present on the ASU campus or use ASU equipment.

25. **Liability.** City will conduct its activities in a careful and safe manner. As a material part of the consideration to ASU, City agrees to assume all risk of damage to and loss or theft of City's property while at ASU, damage to ASU space, and injury or death to persons related to City's use of property, use or occupancy of the space in, upon, or about the space from any cause, and City waives all claims against ASU. City further agrees to indemnify and hold harmless Arizona State University, the Arizona Board of Regents, the State of Arizona and their officers, regents, agents and employees, against all claims, suits, liabilities, costs, damages and expenses (including reasonable attorneys' fees) arising out of or in connection with: (i) City's use of property, use or occupancy of the space, or any activity or thing done, performed or suffered by City, its agents, its employees, licensees, invitees or persons attending or participating in City's activities and use of property and in or about the space; or (ii) any loss, injury, death or damage to persons, property, or the space on or about the space by reason of any act, omission or negligence of City, or any of its agents, contractors, employees, licensees, or invitees; or (iii) any breach or default in the performance of any obligation on City's part to be performed under the terms of this Agreement. City's indemnity obligations will not extend to any liability to the extent caused by the negligence of ASU or its agents or employees. City's obligations and liabilities under this Section shall survive the expiration or early termination of this Agreement.
26. **Insurance.** City, at its expense, agrees to procure and maintain during the term of this Agreement a policy of commercial general liability insurance in an amount of not less than One Million Dollars (\$1,000,000), single limit, Two Million Dollars (\$2,000,000), general aggregate, against claims for bodily injury, death and property damage occurring in connection with City's use of property and space at ASU. All insurance required pursuant to this section must name the Arizona Board of Regents, Arizona State University, and the State of Arizona as additional insureds and must contain a waiver of subrogation against the Arizona Board of Regents, Arizona State University, and the State of Arizona. City agrees to procure and maintain Workers' Compensation insurance with statutory limits unless exempt

under A.R.S. § 23-901 and executes the appropriate waiver (Sole Proprietor/Independent Contractor) form.

27. **Tobacco-Free University.** ASU is a tobacco-free university. For details, visit www.asu.edu/tobaccofree.
28. **WEAPONS, EXPLOSIVE DEVICES AND FIREWORKS.** ASU prohibits the use, possession, display or storage of any weapon, explosive device or fireworks on all land and buildings owned, leased, or under the control of ASU or its affiliated or related entities, in all ASU residential facilities (whether managed by ASU or another entity), in all ASU vehicles, and at all ASU or ASU affiliate sponsored events and activities, except as provided in A.R.S. § 12-781 or unless written permission is given by the ASU Police Department (ASU PD). Notification by City to all persons or entities who are employees, officers, subcontractors, consultants, agents, guests, invitees or licensees of City ("City Parties") of this policy is a condition and requirement of this Agreement. City further agrees to enforce this contractual requirement against all City Parties. ASU's policy may be accessed through the following web page: <http://www.asu.edu/aad/manuals/pdp/pdp201-05.html>.
29. **RECORDS.** To the extent required by A.R.S. § 35-214, the parties agree to retain all records relating to this Agreement and to make those records available at all reasonable times for inspection and audit by one another or the Auditor General of the State of Arizona during the term of this Agreement and for a period of five (5) years after the completion of this Agreement. The records shall be provided at Arizona State University, Tempe, Arizona, or another location mutually agreed by the parties.
30. **AUTHORIZED PRESENCE REQUIREMENTS.** As required by A.R.S. §41-4401, the parties are prohibited from awarding a contract to any contractor who fails, or whose subcontractors/subrecipients fail, to comply with A.R.S. § 23-214-A. Each party warrants that it complies with applicable federal immigration laws and regulations that relate to its employees.

A breach of the foregoing warranty shall be deemed a material breach of this Agreement. In addition to the legal rights and remedies available to each party hereunder and under the common law, in the event of such a breach, the non-breaching party shall have the right to terminate this Agreement. Upon reasonable request, each party shall have the right to inspect the papers of each contractor, subcontractor or any employee of either who performs work hereunder for the purpose of ensuring that the contractor or subcontractor is in compliance with the warranty set forth in this provision.

31. **CONFIDENTIAL INFORMATION.**
 - a. City and ASU may choose, from time to time, in connection with the ASU Services contemplated under this Agreement, to disclose confidential information to each other ("Confidential Information"). All such disclosures must be in writing and marked as Confidential Information. Each party will use reasonable efforts to prevent the disclosure to unauthorized third parties of any Confidential Information of the other party and will use such information only for the purposes of this Agreement.

- b. Notwithstanding any other provision of this Agreement to the contrary, the parties acknowledge that each party is subject to A.R.S. §§ 39-121 through 39-127. Any provision regarding confidentiality is limited to the extent necessary to comply with the provisions of Arizona law.
32. **COUNTERPARTS.** This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which taken together will constitute one and the same instrument, and photocopy, facsimile, electronic and other copies will have the same effect for all purposes as an ink-signed original.

[SIGNATURES ON NEXT PAGE.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives on the respective dates entered below.

CITY OF SCOTTSDALE

**THE ARIZONA BOARD OF REGENTS
FOR AND ON BEHALF OF
ARIZONA STATE UNIVERSITY**

By: _____

By: _____

Name: W.J. "Jim" Lane

Name: _____

Title: Mayor

Title: _____

Date: _____

Date: _____

ATTEST:

Carolyn Jagger
City Clerk

**ARIZONA STATE UNIVERSITY
Rob and Melani Walton Sustainable Solutions Fund:
Global Sustainability Solutions Services**

By: _____

Name: Dan O'Neill

Title: Program Manager

Date: _____

IGA DETERMINATION – ASU

This Agreement, which is an agreement between public agencies, has been reviewed pursuant to A.R.S. §11-952 by the undersigned, who has determined that it is in the proper form and is within the power and authority granted under the laws of the State of Arizona to those parties to the Agreement represented by legal counsel for the Arizona Board of Regents.

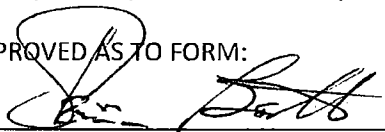
APPROVED AS TO FORM:

Associate General Counsel, Arizona State University

IGA DETERMINATION – CITY OF SCOTTSDALE

This Agreement, which is an agreement between public agencies, has been reviewed pursuant to A.R.S. §11-952 by the undersigned, who has determined that it is in the proper form and is within the power and authority granted under the laws of the State of Arizona to those parties to the Agreement represented by the City of Scottsdale City Attorney's Office.

APPROVED AS TO FORM:



Bruce Washburn, City Attorney, City of Scottsdale
By: Steven Bennett, Deputy City Attorney

EXHIBIT A

Form of Scope of Work

This Scope of Work, dated May 1, 2015, is issued pursuant to, made part of, and governed by the Intergovernmental Agreement, dated _____, 2015 (the "Agreement"), by and between the City of Scottsdale, a municipal corporation duly organized and existing under the laws of the State of Arizona and having its principal place of business at 3939 N. Drinkwater Blvd., Scottsdale, AZ 85251 ("City"), and The Arizona Board of Regents for and on behalf of Arizona State University and its Rob and Melani Walton Sustainability Solutions Initiatives having its place of business at 21 E. 6th Street, Suite 126C, Tempe, AZ 85281 ("ASU").

Scope of Work

1. Introduction

Green organics, primarily leaves and grass, branches and trimmings, represents approximately 30% of the total waste collected in the residential trash bin from municipalities in the Phoenix Metropolitan Area (PMA). This does not include green organics collected through a variety of other municipal programs such as bulk waste collection and municipal parks and golf courses. Nor does this include green organics collected by valley municipalities that provide residential collection using a separate bin for yard waste, or municipalities that own a transfer station and provide for contractor and/or residential drop off.

The majority of this material ends up in the landfill where green organics represent both an opportunity cost as a potential market revenue stream for the municipality, and as a major contributor to landfill-generated methane emissions. The rising economic costs of transportation, handling and tipping fees, along with the associated environmental costs have solid waste managers searching for alternatives that will reduce expenditures and extract value from the green organics feedstock.

Nationally, a variety of thermal and biological technologies have been used to convert green organic feedstock into a valued product and/or to extract energy. These technologies have shown promise but still face challenges to becoming economically and environmentally sound. Some of these challenges include the difficulty in securing long-term feedstock agreements, transportation logistics and source contamination. In addition, the technology best suited to process the available feedstock will vary based upon the type, volume and distribution of the feedstock and the successful implementation of any technology will depend greatly on the market demand of the most valuable outputs of these technologies. As a result, cities, towns and tribes in regions with low tipping fees and little regulatory support, such as the Phoenix Metropolitan Area, are faced with additional economic challenges to financially justify these technologies within the current system.

This proposal outlines a solution that will transform green organics into a resource that drives regional shared value and economic development in the Phoenix Metropolitan Area. The benefits of this regional initiative extend beyond the diversion of green organics from the landfill. Locally sited processing

facilities will generate jobs and decrease hauling costs and miles traveled resulting in reduced fleet maintenance costs, decreased greenhouse gas emissions (GHG) and improved air quality.

This proposal seeks to produce a system design for a regional solution. For the purposes of this proposal, regionalization will be defined through the lens of opportunity based on availability and type of feedstock, existing infrastructure, processing technologies, available lands and potential partners. Throughout the Phoenix Metropolitan Area, regionalization will attempt to define modular or neighborhood solutions that may cross municipal boundaries and engage with the appropriate public and private partners that are best positioned to support increased diversion through an economic development focus.

Regionalization will not only benefit larger municipalities. It will provide the opportunity for all municipalities to benefit through partnerships that could reduce operating costs, increase revenue opportunities and give access to capital development and facilities that would otherwise be beyond their reach of a single municipality.

For this project, green organics will include:

- Residential and commercial yard waste including leaves and grass, branches and trimmings, oleanders and palm fronds
- Horse and cow manure
- Waste Water Treatment Plant (WWTP) sludge
- Fats, Oil, Grease (FOG)
- Other feedstock such as wood waste, dairy waste, brewery waste and other industrial by-products will be included based on industry participation.

At this time, due to the complexity of collections and storage logistics, this project will not include food waste. However, it is anticipated that food waste will be integrated into the system design at a future time.

2. Strategic Approach

The Global Sustainability Solutions Services (Global Services), part of the Walton Sustainability Solutions Initiative (WSSI) at Arizona State University (ASU), proposes this system design to cities, towns, counties and tribes within the Phoenix Metropolitan Area.

The primary goals of this project are to:

1. Develop a system design that identifies economic development opportunities to optimize the value of green organic feedstock through regionalization
2. Create a platform for feedstock utilization and regionalization that will encourage municipalities to collaborate on other waste feedstocks
3. Design a platform for collaborative decision making among the municipalities that includes the benefits of shared value

The scope of the regional systems design, which geographically will include all of Maricopa and Pinal County (*Figure 1 - Maricopa County, Figure 2 - Pinal County*), will be primarily guided by each

municipalities ability to collaborate, location, quantity and type(s) of available green organic feedstock and funding. Cities, towns, tribes and counties with jurisdiction over disposition of green organic feedstocks are invited to participate. Large public and private institutions with the ability to contribute large quantities of green organics are also invited to participate. Other governmental agencies such as the Maricopa Association of Governments (MAG), the Arizona Department of Environmental Quality (ADEQ), Maricopa County Department of Air Quality (MCDAQ) and the EPA are welcome collaborators. Private haulers will be invited to collaborate as the project progresses at a time deemed appropriate by the municipal and agency stakeholders.

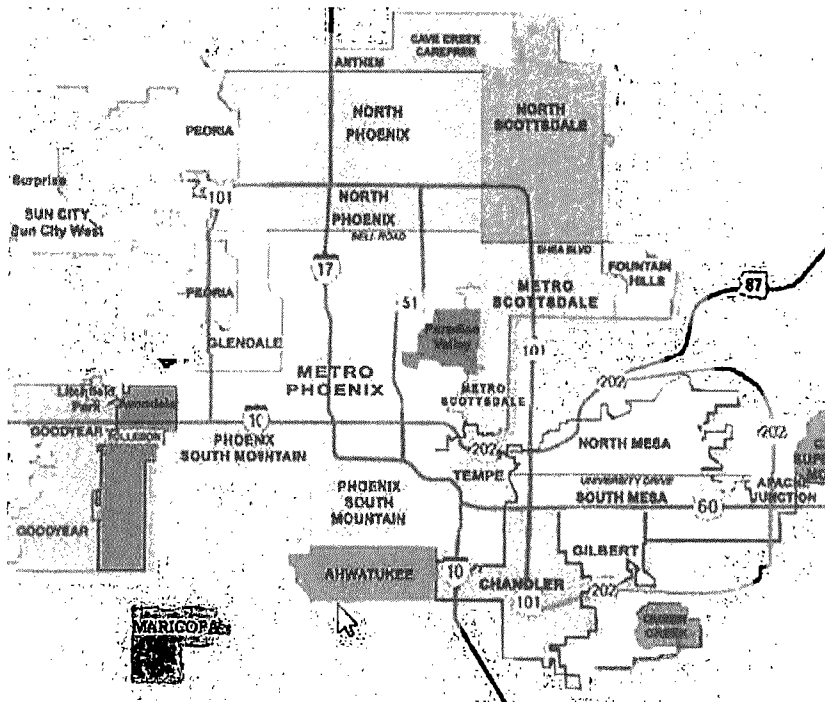


Figure 1 - Maricopa County

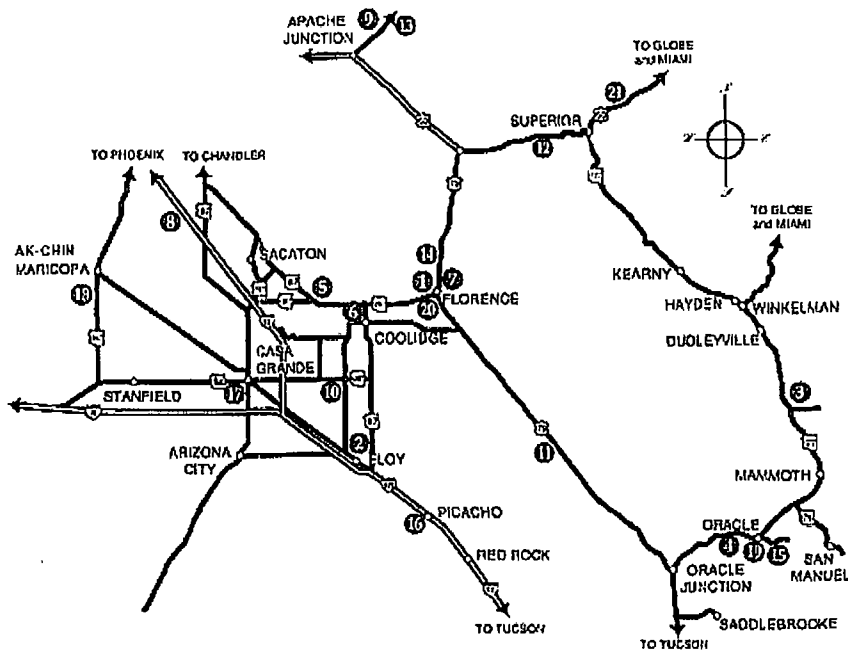


Figure 2 - Pinal County

Development of the systems design will include a literature review, interviews with solid waste professionals, resource management academics and technology professionals and site tours of local or regional facilities. It will also include a geospatial analysis of green organic feedstock and existing facilities in the Phoenix Metropolitan Area and analysis for the siting of processing technologies based on quantity and type of available feedstock clustered to support intake requirements. Each opportunity identified in the resulting proposal will be evaluated within the context of the regional system design. This includes regulatory issues, pre-processing requirements, logistics of source separation vs the ability to process the entire waste stream, collections, storage, seasonality, throughput, capacity, end use and marketability of products and services, and capital and operational costs and revenues.

For each opportunity identified in the system-design, a cost savings comparison of each opportunity and current state will be performed for financial impacts, environmental impacts (emissions, GHG's, water usage, etc), and social impacts (miles traveled, jobs, aesthetics of the facility, neighborhood impacts, etc.). This comparison will be done through the development of a scenario based decision support tool. A model of shared value will be embedded in the tool. This will allow designers and decision makers to analyze a potential system design from the perspective of value creation and other impacts along the three dimensions of sustainability (profits, people and planet), and a reasonable distribution of those impacts and value.

The decision support tool will be used to generate a variety of system design scenarios with related impacts and shared value, based on different configurations of market demand, market prices, organics availability, logistics, multi-scalar system solution components (neighborhood, city, region) and other assumptions. A high-level system design will be assembled from the most promising and doable scenarios. The system design will identify the indicators that can be used to monitor the development and performance of the system over time.

The scenario generation and system design will primarily focus on a comparative analysis of market-ready technologies but it will also research and engage emerging technologies as appropriate. The system design will be driven to answer the following questions:

- On economic development: What portfolio of businesses located across the Valley can be developed to utilize feedstock and share resulting value? In what numbers and at what levels do these businesses exist (neighborhood, city, region)? How many firms and jobs would be created with successful system implementation, and how much new cost savings, revenue and tax base would be created?
- On policy: What policy levers should be considered to enhance markets and incentive technology development and business creation? What return on public investment can result from these policies?
- On market demand: What opportunities exist to develop target markets based on the highest value outputs for each type of green organic technologies?
- On supply: Is there sufficient feedstock to achieve economies of scale and reduce the social, environmental and economic costs of long haul transportation to support locally sited green organics conversion technologies?
- On feedstock: Can a partnership model be identified for long-term feedstock agreements that offers public benefits, including increased diversion and improved service, that shares risk, cost savings and revenue opportunities among municipalities and/or the private sector?
- On technology: What capital, technological, and supply chain assumptions are required to process regional green organics at a cost equal to or lower than current disposal costs?
- On current state: How can existing infrastructure, collection systems and workforce, both public and private be optimized, expanded and incorporated into this system design?

This proposal will attempt to evaluate secondary and unintended consequences of the proposed technologies. A workshop will be held to analyze research of best practices, evaluate market trends and identify opportunities to mitigate negative externalities and unintended consequences.

3. Challenges

This project will be faced with a range of economic, regulatory, social and environmental challenges. Some identified challenges include:

- Cost – meeting ROI requirements
- Shared value concerns
- Market demand
- Technology development
- Transportation
- Current contracts
- Individual city/town policies
- Citizen and policy makers understanding and involvement
- Air quality and regulatory considerations

The system design will address these challenges through a modular approach that will include solutions at the neighborhood, municipal and regional level to implement economical and environmentally appropriate solutions based on the needs of a particular area. Hence, regionalization will be achieved by identifying specific opportunities that could require inter-municipality collaboration and strategic partnerships and collaborations with private feedstock producers, private haulers and conversion technology providers.

The ability and willingness for the municipalities to collaborate is essential to the success of this project. The management of waste, along with other sustainability challenges, requires a new, more collaborative paradigm where municipal operations become more effective through policies and operating practices that advance the economic and social conditions in the region. The challenges of identifying shared value for the various municipalities will be addressed through the advancement of a shared value paradigm.

4. Education, Outreach and Engagement

Currently, the process of landfilling the majority of green organics is the most cost effective solution. However, this practice is neither environmentally nor economically sustainable. The participating municipalities understand this but will be unable to move forward with this process without the support of residents, community leaders, politicians and the private sector. In addition, the interests of local utilities APS and SRP must be considered when evaluating the regulatory framework.

Each of these stakeholder groups has varying levels of back ground knowledge, interest and influence. Gaining a better understanding of the current standing of each group and the potential benefits and negative effects that this project will have on each group will help inform education and outreach plans.

This proposal will include an education, outreach and engagement plan that includes the following stakeholders:

- Public
- Residential and community leaders
- Public decision makers (elected officials, municipal Public Works and Solid Waste professionals)
- Private sector (incl utilities) decision makers

The goal of this plan will be to ensure that a consistent message is communicated across stakeholders and across the region to garner support and overcome barriers to change. The plan will identify effective mechanisms, programs, appropriate media and a timeline for targeting the message.

5. Best Management Practices and Regulations

Successful implementation of any green organics processing technology will require a thorough understanding of the municipal, county, state and federal regulatory governance structure. This includes existing and evolving regulations. For example, all indications are that EPA air quality standards will become more stringent. This could result in significant disruption in the permitting process as even under the current regulations, the Phoenix Metropolitan Area is often not in attainment.

In addition, many of the green organics processing technologies would fall under multiple jurisdictions including, air, water, waste storage and disposal, safety/fire and likely others. This process will perform a complete analysis and documentation of the existing regulatory structure and collaboration with the EPA, AZDEQ, fire departments, MCDAQ and MAG to produce a roadmap and best management practices (BMPs) for implementation and processing of the available technologies.

6. Scope of Work

- I. Literature review
 - a. Regionalization
 - b. Best Practices in Municipal Solid Waste Green Organics programs
 - c. Technology & by products
 - i. Source separation/pre-processing requirements
 - ii. Most optimal processing technology(s)
- II. Current State of Green Organics in the Phoenix Metropolitan Area
 - a. Feedstock types available in the Valley
 - i. BTU content
 - ii. Seasonality
 - iii. Source separation opportunities
 - iv. Processing restrictions/challenges
 - b. Current supply chain for feedstock disposition
 - i. Stakeholders
 - ii. Gaps/opportunities
 - c. Infrastructure
 - i. Public
 - ii. Private
 - d. Relevant policies and governance/management systems
 - e. Market demand for products, co-products, byproducts
- III. Existing contracts and feedstock commitments among the (participating) valley cities, including with contract operators and private haulers and processors
- IV. Policy and regulatory analysis of issues and challenges (local, county, state, federal)
 - a. Supporting policies and regulations
 - b. Inhibiting policies and regulations
 - c. APS and SRP, regulatory framework issues
 - d. Air quality regulations
 - e. Fire/safety regulations
 - f. Environmental quality regulations
 - g. Power generation
 - h. Opportunities for regulatory support
- V. Marketing/PR, Outreach, Education and Engagement
 - a. Shared/consistent messaging for the whole region
 - b. Public/Residents
 - c. Politicians
 - d. Public education (K-12)
 - e. Educating public and private decision-makers about expectations
 - f. Public messaging is critical to show are coming together as a region!
- VI. Feedstock mapping

- a. Total volume available
 - i. Seasonality
 - ii. Collection type(s)
 - iii. Quantity and type
 - iv. Co-mingled or separate
 - 1. Opportunities for source separation
 - b. Based on current accumulation point
 - i. Provide for scenario based optimization
- VII. Technology/End Product evaluation
 - a. Thermal Conversion Technologies
 - i. Gasification/Pyrolysis
 - 1. Biochar
 - 2. Biogas
 - 3. Syngas
 - 4. Liquid Fuel (Methanol, Ethanol)
 - 5. Electricity
 - b. Biological Conversion Technologies
 - i. Compost
 - 1. Best practice for fire prevention
 - 2. Large land application
 - a. Secure acceptance by local farmers
 - 3. Capacity of usable areas in municipal parks, golf courses, right of ways
 - ii. Anaerobic Digestion
 - 1. Co-digestion at WWTP
 - 2. Standalone facility
 - 3. Biogas
 - 4. Digestate WTE
 - iii. Vermiculture
- VIII. Develop Research Agenda
 - a. Long term effect on landfill due to reduce green organic component
 - b. Source reduction policies at municipal level

7. Deliverables

Phase 1

- 1. Literature review
 - characteristics of feedstocks located in the Phoenix Metropolitan Area
 - available processing technologies and by-products
 - source separation/pre-processing requirements
 - most optimal processing technology(s)
- 2. Analysis of current state
 - feedstock available volume, types
 - supply chain for feedstock disposition
 - public and private infrastructure
 - existing contract and feedstock agreements
 - market demand

3. Regional map of current available feedstock volume

Phase 2

4. Marketing/outreach/education/engagement plan for residents, residential and community leaders, public decision makers (elected officials, municipal Public Works and Solid Waste professionals) and private sector (including utilities) decision makers
5. List of supporting and barrier regulatory policies at the local, county and state level, recommended Best Management Practice (BMPs) will be identified.
 - Investigate regulatory requirements for processing technologies concerning storage and residue
 - Air Quality – VOCs, GHG
 - Water
6. System design that identifies the potential sites and technologies where the type and volume of available feedstock can be processed in an economically and environmentally accepted way, based on a flexible market demand determination.
 - Identify specific high value opportunities and include a market development plan, policy recommendations and an unintended consequences analysis
 - The requirements for proposed technologies will be specified to a level of detail that will support municipalities that seek to issue RFPs, together or alone.
7. Decision support tool that provides scenario based analysis for cost and revenue assumptions that will allow the participants to identify collaborative opportunities that meet ROI requirements.
 - This tool will quantify the sustainability impacts (Economic, Social, Environmental) of each scenario.
 - Includes economic development analysis that provides a baseline for decision tool for specific high value opportunities
8. Outline for a platform for collaboration among the municipalities that includes the benefits of shared value in the decision making process

8. Project Team Roles & Responsibilities

Project management and development of the system design and supporting deliverables will be performed by the Solutions Services with the support of an advisory committee and a team of ASU faculty.

8.1. The Global Sustainability Solutions Services

The Julie Ann Wrigley Global Institute of Sustainability (the ASU Wrigley Global Institute) at Arizona State University (ASU) is the home of a formal network of more than 260 Sustainability Scientists and Scholars who research and teach in a wide variety of disciplines, the first ever comprehensive School of Sustainability, and the Rob and Melani Walton Sustainability Solutions Initiatives (WSSI).

The Global Sustainability Solutions Services (Global Services), one of the WSSI initiatives, utilizes expert teams to collaborate with partners and clients on real, practical and effective sustainability solutions. Solutions can be delivered utilizing any combination of in-class projects, graduate student workshops, student internships, student employment, and expert consultants. This portfolio of service delivery can

be collaboratively optimized with partners and clients to provide customized on-time, competitive, and high-quality sustainability solutions, while also providing students the educational and experiential opportunity to apply sustainability knowledge.

8.2. Advisory Committee

Leading solid waste professionals from throughout the Phoenix Metropolitan Area have been recruited to form a Design Advisory Committee. The design committee will perform the following functions:

- Proposal development
- City recruitment
- Funding advice
- General guidance
- Recommendations for technical committee members
- Private sector involvement

8.3. Faculty Team

A team of ASU faculty will be recruited to provide guidance for this project. Faculty members will be recruited for their expertise in the following areas:

- Geospatial systems design
- Landscape Architecture
- Policy, messaging, behavior
- Green organics conversion technologies
- Shared value
- Public-private collaborations and partnerships

8.4. Collaborative Partners

Throughout this project we will engage with other public and private entities that add value to the development of the system design. Potential collaborative partners include:

- Green Mountain – Contact details with Phoenix
- Burns & McDonnell – Scott Pasternak
- Biochar – Ricardo Aguirre
- Fresh Recycling – Emily Vaiu

9. Project Plan

Proposal to Develop a System Design for a Regional Solution to Divert Green Organic from the Landfill	Duration	2015												2016													
		M	J	J	A	S	O	N	D	J	F	M	A	M	J												
Project Initiation																											
Kick-off, project start up (Incl GIS hours for student interviews)	1 week																										
Project Management/ Stakeholder Engagement																											
PM, Engagement, business development, design committee	48 weeks																										
Current Status																											
Feedstock types available in the Valley	2 weeks																										
Supply chain for feedstock disposition	2 weeks																										
Public and private Infrastructure	2 weeks																										
Identify existing contracts and feedstock commitments	3 weeks																										
Relevant policies and governance/management systems	2 weeks																										
Market demand for products, co-products, byproducts	2 weeks																										
Literature Review																											
Regionalization	2 weeks																										
Research best practices MSW GO programs	2 weeks																										
Technologies and by-products	2 weeks																										
Source separation/pre-processing requirements	2 weeks																										
Most optimal processing technology(s)	2 weeks																										
Feedstock Mapping																											
Research regional green organic sources (Incl site visits)	4 weeks																										
Research regional GO accumulation points (Incl site visits)	4 weeks																										
Data gathering for resource inventory (using Mass. Coefficients Incl verification)	4 weeks																										
Develop GIS shapefile	2 weeks																										
Spatial optimization	2 weeks																										
Testing of shapefile	1 week																										
QA / acceptance testing	2 weeks																										
Behavior/Education/Outreach/Marketing																											
Regional residential and community leader education and outreach plan	2 weeks																										
Regional public decision maker education and outreach plan	2 weeks																										
Regional private sector (Incl utilities) education and outreach plan	2 weeks																										
Technology Evaluation (Incl site visits)																											
Evaluate compost and mulch technologies and end products	2 weeks																										
Evaluate Anaerobic Digestion technologies and end products	2 weeks																										
Evaluate gasification, pyrolysis and similar technologies and end products	2 weeks																										
Evaluate vermiculture and similar technologies and end products	2 weeks																										
Evaluate other technologies and end products	2 weeks																										
System Design																											
Develop sustainability indicators for assessing system progress and success	3 weeks																										
Develop shared value framework	3 weeks																										
Develop Decision Support Tool (with sustainability impacts & shared value framework)	14 weeks																										
Conduct QA / acceptance testing	8 weeks																										
Economic Development Analysis	2 weeks																										
Generate alternative design scenarios (priorities)	3 weeks																										
Policy and regulatory analysis (Air Quality – VOCs, GHG, Water)	4 weeks																										
Create market development plan	4 weeks																										
Hold unintended consequences analysis/workshop and doc results	2 weeks																										
Develop matrix of existing contracts and terms	2 weeks																										
Create specifications for IGA & RFP support	2 weeks																										
Draft final report	2 weeks																										
Finalize and review deliverables	4 weeks																										