What you need to build a quality, proactive outreach plan.
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This is a resource for communicating about biosolids in ways that are factual, science-based, and easily understandable by those who might be hearing about biosolids for the first time—your neighbor, a city council member, or your mom.
Elevating the Conversation About Biosolids

Water Environment Federation members know the significance of the use of biosolids to wastewater treatment and to the communities we serve. The benefits are obvious but not always without controversy. Our member volunteers have done a significant amount of work to elevate the conversation about what biosolids bring in terms of innovation, resource recovery, and stewardship, and we think you’ll agree that this work is even more important in today’s environment.

This biosolids communications toolkit builds on and expands the digital resource developed by WEF and can be used by WEF members to help raise awareness and support for the use of biosolids. This is a resource for communicating about biosolids in ways that are factual, science-based, and easily understandable by those who might be hearing about biosolids for the first time—your neighbor, a city council member, or your mom.

The toolkit includes guidance on some of the more challenging communication tasks you may encounter—responding to, or proactively pursuing media coverage, handling concerns raised about the safety of biosolids, creating presentations for use at events or meetings with the public, and developing content to post online or on social media. The toolkit features messages that serve as an overall umbrella that can be adapted for FAQs, talking points, community meetings, fact sheets, brochures, social media, and websites.

Think of this toolkit as a do-it-yourself handbook designed for the range of utility professionals who may need it. Some may want to follow all the step-by-step guidance the toolkit offers while others may only need specific sections. You are encouraged to use this as a reference any way you need, to address any number of issues related to biosolids, to create messages, to see samples for best practices, and more.

WEF members are incredibly proud of the services we provide and know biosolids are part of our innovative industry’s future. This toolkit, and the accompanying training, will help make you proficient at communicating all that biosolids can do, as you share how valuable this resource is.
QUICK START:
If You Do Nothing Else,

DO These 10 THINGS

The goal of this toolkit is to provide guidance for utility communicators or staff to effectively communicate about biosolids. Some may want to understand how to build a quality, proactive outreach plan. That’s in the next section. Some may just need to know what to do RIGHT NOW. This section is for you. And some may just want to know how to do some things, but not everything. We encourage you to use the table of contents to see what’s inside and skip to the guidance that’s most useful for you.
For those of you who just need a quick jump start on what to do right now, here's your hit list of tasks:

1. **Start using the message platform** in this toolkit in all your materials. Be sure to note terms to avoid. Update all existing materials and share revised materials with your staff.

2. **Make sure you have a web page** dedicated to biosolids. In addition to facts and figures, share stories of real people doing the work, and those benefitting from biosolids. Include a way for those who read your web page to get in touch with someone for more information.

3. **Start a conversation on social media!** Use the sample posts we have provided in this toolkit.

4. **Improve your photography.** It’s so true a picture is worth much more than words, so show, don’t tell. We offer some tips on taking photos and using imagery in this toolkit.

5. **Talk to your leadership about** taking a measured, proactive approach to communicating about biosolids, using the guidance we provide for making the business case.

6. **Prioritize your stakeholders** to save time and resources so you are certain to be communicating with the folks with the most influence in your success. Check out the stakeholder chart for guidance.

7. **Identify partners and influencers** who can add credibility to your story and help you get the messages to audiences beyond your reach. Talk to them about your messages and discuss collaboration opportunities.

8. **Create a presentation** about your program that can be customized for a variety of audiences. Discuss the process for creating biosolids, the benefits, the applications and use lots of imagery and data to tell your story.

9. **Invite the media, customers, elected officials,** and others to take a tour of your plant. Explain the process for creating biosolids and describe the end users and end products, highlighting the benefits.

10. **Have a plan for dealing with disagreeable people.** Consult the difficult conversations section and discuss with your leadership who will handle these situations. Prepare messages in advance and remember to seek understanding first, show empathy, then present facts.
How to Create a Strategic Communication and Outreach Plan

Just like any successful project, communication and outreach must start with a proactive, strategic plan that includes measurable objectives that are grounded in research and evaluated for a return on your investment of time and money.

Make the Business Case for Proactive Outreach

It’s important to stress that this is a proactive approach. Being proactive ensures you are the first one out there talking about biosolids. One of the first rules of public relations is whoever is first is right. The second or third voices must then respond to what’s already been said. The first voice therefore gets to set the agenda. Followers have the burden of changing it. This is why it’s so important you don’t wait for the media to call you about biosolids. Having a plan positions you to be first, authoritative, consistent and assertive.

We know that some clean water utilities are still reluctant to be assertive about communication or to be “out there” at all. They fear backlash. They fear public scrutiny. It’s understandable, but here’s the business case for a proactive approach.

Media coverage of wastewater news is growing. These topics that rarely made it into the news 20 years ago, are now — because of issues like major sewer spills or stories about personal care products in our rivers — having an impact on customer perceptions of their clean water utilities. Social media is no different. With more than 500 million messages shared daily on Facebook, Instagram and Twitter, you can be certain that people are talking about wastewater and biosolids in some way. Whether you are in that conversation or not, people are talking about you. And, while these conversations are increasing in their number and fervor, public trust in government agencies is declining.

So this combination of heightened conversations happening and the growing mistrust of government means utilities need to enter the conversation with purpose! The only way to grow trust is to communicate, early and often, about what you are doing. You are the experts in your field and it’s your voice that should own the conversation about wastewater and biosolids if those conversations are already happening; and to be the conversation starter if they haven’t happened yet.

The first rule in building trust is communication, and the first rule in setting the agenda — and being seen as the most trusted source of information — is to be the first and loudest voice out there. The silent service provider will be silent at their own peril and face more backlash and scrutiny and distrust, so it’s imperative you get out there and communicate.
Developing an outreach plan is a four-step process that can be scaled for low, medium, and high dollar budgets and small, medium, or large teams.

The Four Steps Process
1. Research
2. Planning
3. Implementation
4. Evaluation

Each of these steps are scalable depending on available funding and time. We’ve organized them into three categories to address the diverse levels of resources readers of the toolkit may have: Ground Level, Subsurface, and Dig Deep.

- Ground Level is the least expensive, easiest way to get the job done, best for smaller agencies with limited resources.
- Next is Subsurface, which requires a little more time or money.
- The last is Dig Deep, which requires the most time and resources. We encourage you to use the solution that’s the best fit for you.
Step One: RESEARCH

One of the primary ways to build a program that’s strategic rather than tactical is by conducting some basic research first. Though not required, even just a little bit of market research before you begin can help you understand your current situation and allocate your resources most effectively. If you can obtain baseline information on how your stakeholders currently think about biosolids, you can actually measure progress in building awareness or even changing opinions.

Research can help you define and identify:

- **WHO**
  Do you need to reach?

- **WHAT**
  Do you want them to know, do, or believe?

- **HOW**
  Will you reach them?

- **ENVIRONMENT**
  What environment will you be working in, meaning what external factors will impact your success?

- **MESSAGING**
  What messages should you convey to change their awareness, attitude or behavior?
Gauging public support or opposition is pretty easy. You can tell how your customers and/or stakeholders feel about biosolids by examining calls to your customer service department, comments on your social media posts, comments on news articles about biosolids, or even how news articles are written.

Measuring the public’s level of awareness about biosolids is a bit trickier. You have to pick a point in time to measure the current level of awareness of something, such as the benefits of biosolids, then choose a time in the future, after you’ve spent some effort seeking to educate them, to measure their awareness again. Change is often incremental and slow. You may want to give yourself a solid year to see a change.

Through this research you want to examine two things: the current situation and your audiences. Both have bearing on your success. The following are some ways to get this step done, depending on your resources.

GROUND LEVEL

Analyze the Situation

One of the most basic and no cost ways to understand your current situation is to gather together a cross section of your utility’s leadership team to conduct a current state assessment or situational analysis. It’s important the group come together to do this, as each leader will bring a different perspective to the table.

Here are some questions to help you examine your current state:

**Internal**

What’s the culture toward outreach and communication?
Do we have buy-in from above? Below? Is there fear?
What drives our position? Has there been a negative past experience?
What resources (people) are available?
What budget is available?
Are we limited in our ability to use social media or our website?

**External**

What are the demographics of our audiences?
How will that influence how they feel about us and our projects?
What is our current reputation with them? How do we know?
What political forces may impact our work in the next year?
What regulations may impact us and how?
How is the local economy? How will that influence our income? Rate changes? Major projects?
How are we perceived as environmental stewards? Negatively or positively?
Identify and Prioritize Stakeholders

Your outreach is driven by your audiences. Who they are, what they know, and how they think should drive everything from your choice of where you communicate—your communication channels—to what you say and how you say it. It’s critical you really understand your audiences well. Some no cost ways to do that include:

- Reviewing demographics of your service area from your local economic development council or the U.S. Census Bureau. Your local newspaper may have this information in its advertising information. Another source is Wikipedia.
- Check with other local government entities to see whether they have conducted any service or opinion polls within the last year or two. You may be able to get a general sense of the awareness and feelings about utility services.
- Scan media coverage from the last one or two years using key words that pertain to your work, such as utilities, wastewater, biosolids, farming, fertilizer, water pollution, etc.
- Use the measurement tools that are offered by the social media platforms you use to track your followers, who they are, where they live and what they’re saying about your posts. Seek out free trials of software that track conversations on social media, like Hootsuite (www.hootsuite.com) or Social Animal (www.socialanimal.com). Using key words, you can see what people are saying.
- Post a one or two question poll at your website or on your Facebook page to find out (1) what do people know about biosolids and/or (2) what they think about them.

After you brainstorm a comprehensive list of everyone that might be impacted or have an interest in biosolids, you want to prioritize these stakeholders according to key criteria, such as their interest, influence, financial stake, emotional stake, and those on the periphery who are still important enough to keep in the loop.

A chart like this one helps determine the type of engagement you’ll need for each stakeholder audience. While all stakeholders are important, some will likely require more attention than others. This chart helps you organize them by priority of interest and influence, which can help you see where to allocate time and resources in a logical way. This is sample of how a stakeholder map could look.
This sample chart may be true for most, but you should do this exercise with your internal team to get shared understanding and agreement. The upper right corner are stakeholders you need to be reaching out to the most, followed by the upper left corner, then the lower right, and finally, the lower left corner.

To take your audience research a little further, you may want to actually poll them. There are a few ways to do this, and they can vary in the amount formality. Just know that the more formal and rigorous you are, the more accurate you can be; the rigor and formality adds cost, though. Here are four inexpensive ways to get some baseline information. Do as few or as many as your time and budget permit.

**Survey Your Community**

An online, fully anonymous survey is a great way to get baseline awareness level measurement. Ask direct questions with closed, scaled answers to assess degrees of agreement and knowledge, and use multiple choice for exact knowledge or preferences. A quality survey requires clarity on what it is you want to know. Then you need a plan for how to get your customers to take it, such as using partners, the media, your website, and social media. Tap partners in the community who can share the link. Plan to keep the survey live for two to three weeks or until you have at least 384 completed surveys, whichever comes first. Obtaining 384 completed surveys assures a 95% confidence interval with a +/- 5% margin of error for populations of 1,000,000.

**Offer Focus Groups**

A series of up to three focus groups following the survey can help you probe deeper into the “whys” behind the data, and it can give you an opportunity to test new messaging or outreach ideas. Focus groups can take a few months to plan for logistics (securing a location and food); recruitment (getting 10-12 representatives of your service area in the room); and developing the actual guide to moderate the conversation. Note you may need to recruit 20 people to get 10-12 to show up.

**When You Can’t Meet in Person**

If you are unable to have face-to-face interactions, such as with focus groups or intercept interviews, don’t despair, these can be done online instead. Tools like Zoom and WebEx and other online meeting software can offer similar opportunities for virtual interaction but must be carefully planned and will likely need a few more facilitators to go smoothly. In lieu of virtual focus groups, other digital tools can be used to build understanding of audience awareness and opinions.
Conduct Intercept Surveys

Intercept surveys are another tool that can be used to take a quick pulse of a community. Usually shorter in length than a digital survey, intercept surveys are done in person, in a high foot-traffic area, such as at a mall or outdoor park. The questions in this survey should be of the same style as the digital survey, meaning closed-ended. Intercept interviews only require the time it takes to develop the survey and then to physically be out in the field collecting responses. Depending on how many people you have available to conduct them, and how busy the area is, you may be able to get 100 surveys in one day and that is a good target to get a snapshot of data.

Conduct In-depth (Influential) Interviews

In-depth Interviews (IDIs) are another way to get insights from your audience. An IDI is great for understanding what the most influential members of your audience are thinking. IDIs require that you (1) identify the top 10 influencers in your community and (2) conduct a 30 to 45-minute phone call with each of them. Figure about a two-week period to conduct them, and 10 should be enough.

It’s best to incentivize participation in surveys and focus groups by offering a drawing for survey participants (valued at $100) and a stipend ($100) and food for focus group attendees. For IDIs, it’s important to interview true influencers and not just people who happen to be available to talk. You need input from the people who are aware of high-level community issues and strategy and who are driving conversations.

Conduct Formal Surveys

A professional research firm can help with a statistically significant survey. For many service areas, this means getting at least 384 surveys completed for a 5% margin of error. They can also ensure participants are selected at random and truly meet the demographics of the service area. Another value to using a professional market research firm is in question creation. They know best how to develop questions that are not leading. A formal survey like this can cost around $20,000.

Conduct Formal Focus Groups

If you have the budget, hire a professional focus group recruiter and facilitator. They can, for a fee, help get people around the table that most closely represent your service area. They are also formally trained to facilitate a conversation around the topics you want to probe, which may include topics like what do you think of biosolids, or what do you think the word biosolids means? Paying attendees to participate in a two-hour session (more in metropolitan areas, and more for daytime sessions with business community members) ensures you get people who are completely disinterested in your topic, meaning, they don’t already have an agenda when they arrive, and they are a good proxy for your audience.

A focus group firm will charge a flat fee to create a screener for recruitment (a description of who you want around the table) and a flat fee to create the moderator guide (the questions they will ask). They will also charge a fee for audio and video recording and transcription. In addition, they will charge about $100 per person for recruitment, $125 per attendee for stipend, plus reimbursement for food and any facility charges.
Step Two:

PLANNING

Once you’ve completed your research, you should have an excellent sense of what problem you need to tackle and who exactly are your key stakeholders. If you are able to poll them or talk to them, you will also know how to focus messages. For most cases, your problem will be a lack of awareness about biosolids or fear or concern about the safety of using biosolids, or simply, the “yuck” factor. The planning step is where you identify your plan goals, who you need to reach and your objectives for reaching them, the channels you will use to reach them, and your messages.
Set Goals

Turn your problem statement into an overarching goal statement to guide your efforts. The goal statement doesn’t need to be measurable but should be directional.

For example:

- To raise awareness among customers of the benefits biosolids offer our community.
- To reduce fear or concern about the safety of using biosolids.
- To reduce the perception of biosolids as a dirty, useless end product.

Create Measurable Objectives

Recall that you need to have baseline understanding of the current situation to effectively measure the change you want to see over time. The research helps you know your baseline. Creating measurable objectives gives you your target, as well as your time frame. Measurable objectives, therefore, have three key components: time, measurement, and change and they should be audience specific.

Since your success is correlated somewhat with the amount of time and effort you can put into an outreach effort, a measurable objective for a customer across the three levels of resources might look like this:

**GROUND LEVEL**

Within 15 months, 30% of people, when surveyed, will be able to recall what biosolids are.

**SUBSURFACE**

Within 12 months, 40% of people, when surveyed, will be able to recall what biosolids are.

**DIG DEEP**

Within 12 months, 45% of people, when surveyed, will be able to recall what biosolids are and will be aware of their benefits.

The objective above assumes the baseline awareness of the cost-saving benefits of biosolids is lower than 30%. Perhaps it’s currently at 20%. So, in the more basic of efforts, the increase or change you are seeking is 10%. That’s attainable with a good effort over the course of a year. With more money and attention, you could shoot for a 15 to 20% increase over 12 months, or keep it at 10% but shorten the timeframe. With more resources, your target can be more aggressive. The point is to set something that’s a reach, but attainable.

This measurement of change is the core way a merely tactical plan becomes a strategic one. This is now a strongly defensible approach that focuses your use of resources intentionally, in a way that produces results you can measure. This is an effective way to build buy-in and support for further investment in outreach from leaders in your agency.
Select Strategies and Tactics

Your selection of communications channels (where you will communicate) to achieve your objectives should not be random or based on convenience or a gut feel. Who and where your audience is and how they obtain and consume information should drive which strategies and tactics you select. So go back to your research to see what you know about your audiences.

- What are their primary sources for information?
- Are they reading the local paper?
- Checking Facebook?
- Do they actually go to your website?
- Is there an environmental or community organization that has a large following?

The more you know about the audiences you need to reach, the more targeted you can be. It’s the difference between KNOWING you are reaching the key audiences you need to and HOPING you are.

Once you know this information from research, you will want to create a chart similar to this, to help you organize your implementation activities.

<table>
<thead>
<tr>
<th>Audience</th>
<th>Message</th>
<th>Channel</th>
<th>Timeframe</th>
<th>Resources Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Biosolids are an endlessly renewable resource</td>
<td>Their monthly meetings</td>
<td>Monthly</td>
<td>Article</td>
</tr>
<tr>
<td>Groups</td>
<td></td>
<td>Submit articles for member</td>
<td></td>
<td>Slide deck</td>
</tr>
<tr>
<td></td>
<td></td>
<td>newsletter or blog</td>
<td></td>
<td>Handout (fact sheet)</td>
</tr>
<tr>
<td>Local Media</td>
<td>Biosolids help create resilient local economies</td>
<td>Contact via email or Twitter</td>
<td>At</td>
<td>A strong pitch with statistics, infographics, and/or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Milestones</td>
<td>interview subjects</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td>Customers</td>
<td>Biosolids help beautify communities affordably</td>
<td>Partners (affinity groups)</td>
<td>Weekly</td>
<td>Content for partners to share</td>
</tr>
<tr>
<td></td>
<td></td>
<td>local media</td>
<td></td>
<td>Images, infographics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>social media</td>
<td></td>
<td>Video</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>Stories</td>
</tr>
</tbody>
</table>
Biosolids are, for most Americans, largely an unknown thing. The term is very science-y sounding, and frankly, a little gross. If you haven’t started communicating about biosolids, it’s going to take some time to penetrate through a community with this idea. Diffusion Theory says people tend to move through five stages—Awareness, Understanding, Trial, Adoption, Confirmation—as they learn and adopt a new concept into their lives. How fast a person moves through these stages depends on what kind of “adopter” of change they are and how much resources and time you have to spend. An awareness-raising campaign or effort about biosolids will therefore require a consistent, multi-layered approach over time. Don’t expect to do a few things occasionally and get good results. Why? Because people are busy and inundated with millions of messages each day. Your message about biosolids must get through and it will only do so with a consistent, concerted effort that people see many times, in many of the places they look for information.

Having a website is considered the most basic of tools you will need. As you build awareness, you should consider a fully integrated approach that uses a variety of strategies and tactics. Here are a list of possible strategies and tactics you may need, depending on your audience.

- Dedicated website
- Fact sheets or brochures that can be handed out at events or meetings
- Social media image posts (we’ve provided some samples)
- Video of end users safely using biosolids or of the biosolids creation process
- Presentation that can be customized for different audiences and used in meetings
- Bumper stickers or other stickers to hand out at events to promote their safety and/or benefits
- Infographics and imagery that clearly explain data
- Articles you write or that partners or end users write that tell the story of the benefits of biosolids and can be submitted to local newsletters or pitched to local media

When you get to the section on implementation, we will provide some tips for working with partners, pitching to the media, for using social media effectively, and for advertising in a scalable way.
Before You Reach Out Externally, Conduct Internal Outreach

It’s important to talk through your outreach plan and messaging with internal stakeholders before talking to your external stakeholders. Doing this ensures your agency is a united team as you talk about biosolids openly in the community. It ensures there are no surprises to or from leaders and it gives you a chance to share messages, Q&As, and materials internally, so everyone in the agency feels equipped and empowered to talk about biosolids in a positive and meaningful way.

First, consider briefing leadership. If you assembled them for a situational analysis, this is a perfect time to share how you turned that session into this plan. They will appreciate the follow-through and to know that their input went somewhere. Walk them through the elements of the plan and the messaging, being sure to discuss the rationale for your choices. Get agreement on how success will be measured. We offer guidance in the evaluation section and you’ll want to share those numbers with leadership, too, to make sure they agree.

Also, consider offering a special session for customer service staff and field service staff — anyone who may be in a position to speak to the public. Share the message platform with them and talk through any questions or clarifications they need.

Share the materials and messages agency-wide and ask for staff support on social media, by liking and sharing agency posts with their own networks. Ask for their help listening to the community and have them report to you what they’re hearing.
How to Work With Traditional Media Outlets

Despite the popularity of social media, engaging traditional print and broadcast media is still a very effective way to raise local awareness of the existence and benefits of biosolids in your local community. A positive or even balanced story on biosolids has greater impact on audiences than what can be read on your website or blog, as it comes from a neutral third party. In addition, media articles can do double duty by providing credible content that you can amplify through social media.

As is the case with informing your policymakers and elected officials, when you take the time to inform and educate your local media outlets of the benefits of biosolids, it will help inoculate THEM against potential claims by biosolids opponents. In other words, getting to the media first with your information will help you earn valuable credibility with them.

Strategies
Community Partnerships and Third-Party Influencers

One of the most effective strategies to raise awareness and build understanding for biosolids is through partnership marketing and third-party influencers. This is effective because it enables you to tap into a group that already has an established and trusted relationship with the audience you are trying to reach.

For example, a community growers group, composed of local farmers, could be a valuable partner in promoting biosolids to other farmers, gardeners and other members of your audience. Your community’s parks and recreation department could be another group that connects with residents about outdoor recreation and may be willing to share how biosolids helps them maintain green space cost effectively. Scientists can add a level of assurance and certainty to the safety. They can explain data, risk factors, and help frame the issue for the media and other audiences.

Third-party influencers are individuals with influence in the community, who may or may not directly benefit from promoting your biosolids story. A good influencer is someone who is well respected, not controversial, with a large following on social media, or who hosts a popular blog or podcast.

Reach out to them and explain the message you are trying to get across. They may be willing to share it with their followers for free, or for a small fee that you can negotiate up front. You will also need to negotiate the messaging to be sure that biosolids are spoken about in the way you need. If the influencer asks for a fee, note that they will be obligated by the FCC to be transparent about the financial arrangement, which can be as simple as including the hashtag #paid in the post.

Any agreement you create with the influencer should clearly include the messaging, imagery to be used, words to use and not use, frequency and/or number of posts, and over what time period. As you consider different influencers to connect with, vet them carefully. Review their past posts to make sure they are respectful.
to all audiences and haven’t, in another post, made a comment or taken a stand that’s counter to yours. Make sure they have a clean record and are an uncontroversial, respected member of your community. Also make sure they haven’t relied on pseudoscience to make a point. Your credibility will be tied to theirs, so keep that in mind.

**GROUND LEVEL**

Conduct some basic outreach to your local media

- Carefully identify people who are subject matter experts at your facility who can act as spokespersons and who have an outgoing style. Make sure they are credible, can answer questions crisply and effectively, and are not likely to get nervous in front of a camera.
- Research who would cover biosolids in your media outlets and study what they write about so that when it’s time to approach them with a story idea, you can personalize it to them. It’s important to keep this list updated, so check it quarterly, as reporters move positions a lot.
- Personal relationships are critical, so take the time to get to know your local reporter. Occasionally send them an interesting story idea that doesn’t benefit you.
- Send story ideas or news releases directly to individuals, not a long list, with a short, tailored message.
- Once you’ve made contact and are in conversation, make sure you are always helpful and responsive. Be someone they know is a competent source that makes their job easier.
- Invite media to organizational events and treat them as an important guest.

**SUBSURFACE**

Pitch and package a story for your local media

- Story ideas are known in the industry as a “pitch.” Respect a reporter’s time by making sure your pitch is short and compelling. Keep your agency out of it and focus on the community benefit. Reporters smell self-promotion a mile away and avoid it.
- Tie your pitch to a trend or interesting theme or an article they wrote about recently and take it a step further.
- Use the information you’ve gleaned from your research to customize the story idea you are sending to a reporter – time spent tailoring your idea will pay off.
- Spend time on the email pitch subject line. Often this is the only thing that determines whether your story idea gets picked up.
- Don’t just send and hope. Follow up in three days, five days and seven days. Your follow ups can be as simple as forwarding the message you originally sent and asking, “Any interest?” In your second follow up, offer an image or video or infographic that you didn’t offer previously. In your third follow up, offer a specific person to them they can interview, with a short bio embedded in the email.
What is newsworthy?
According to a document from PBS News Hour, all news pieces have at least one of these components:

- **Timeliness**
  It’s news because it’s “new.”

- **Proximity**
  We care more about things that happen “close to home.”

- **Conflict/Controversy**
  When people argue about actions, events, ideas or policies, we care.

- **Human Interest**
  People are interested in other people, and unusual or heartwarming stories resonate because we can identify with them.

- **Relevance**
  We value information that is relevant to us; information that helps us make better decisions.

Write and submit and “Opinion-Editorial (Op-Ed)”
An Op-Ed is a 500-800-word article that you can submit for consideration by your local paper that takes a position on a topic. If the piece is written well, clearly makes a case with supporting facts, is succinct and insightful, you will have a good chance at getting accepted. The piece should be signed by the most senior person at your agency (seniority holds weight). Be aware that many papers require your Op-Ed to be exclusive to them, meaning, you don’t send it anywhere else for consideration. Like other articles, you can get extra mileage on an Op-Ed by sharing it on your social media once it’s published.

DIG DEEP

- Help reporters and producers by doing the prep work - package your story so it’s ready to go. Line up the video, imagery, and interviews with operators, engineers, farmers and consumers, all the people involved along the biosolids supply chain.
- Continue to stay in contact long after they run your story. Send reporters story ideas that don’t involve your organization but could benefit them. Don’t be the one who only calls when they need a favor.
- Primary research you conduct can often be the basis for a positive news article, so share customer survey results and other research that is informing decisions and policies being made at your utility.
- Provide special behind-the-scenes tours and access to reporters.
- Make sure all members of your agency that may end up in front of a camera or microphone have been media trained.
What To Do When a Reporter Accepts Your Pitch

Congratulations! Your pitch has attracted interest – so now what?

- Get back to the reporter immediately to confirm interest, information needs, and deadlines.
- Brainstorm all the questions that are most likely to get asked by the reporter and conduct a mock interview with your spokesperson to ensure they are comfortable with questions they are most likely to be asked. Don’t shy away from including “worst-case” questions you think are unlikely to get asked but would rattle your spokesperson.
- Prepare a digital media kit with key graphics to share with the reporter to help visually communicate your key messages. You can provide this on a branded flash drive or a link to a page at your website that’s just for the media.
- Consider making an audio or video recording of the interview for your files. This can help you provide constructive feedback to your spokesperson after the interview to improve their performance next time, give you valuable protection against the risk of being misquoted by the reporter, and provide great content you can reuse for social media.

How to Respond to a “Hit” Piece

The topic of biosolids has been known to be the subject of what we call a “hit piece,” meaning a very one-sided, negative story. The best defense for a hit piece, is of course, a strong offense — being out there first, being proactive, and setting the agenda.

If you haven’t been communicating yet to your community about biosolids, and this piece shows up in your local news, now is your chance, however defensive you might feel.

Here’s how to handle:

1. Go through the article line by line and look for misinformation that you can correct.
2. Post the article with your corrections to your website.
3. Reach out to the reporter first, and then the editor if you don’t get satisfaction, and share your facts and corrections.
4. Share the link to your corrected piece on social media.
5. Once that’s done, get more proactive and intentional about biosolids outreach and communication. Create a more comprehensive web page about your biosolids program and work that content into your social media content plan. Seek out community opportunities to speak about biosolids. Bring in end users and experts who can speak authentically to the benefits and safety of biosolids.
6. Keep that reporter on your contact list and share research as it becomes available.
Social Media

More clean water utilities and biosolids producers are using social media. If done strategically, the benefits of the relationships you’ll build with your customers and the degree to which you’ll shape your brand and reputation will greatly outweigh the risks. Social media gives you the opportunity to communicate directly with your stakeholders without the filter of traditional media.

Social Media Best Practices

Be a follower. Like/follow/subscribe to other biosolids producers and advocates to help foster meaningful conversation and increase understanding.

Share. An easy way to get started using social media is to like/retweet/share posts from other respected biosolids producers across the country. With little effort, you’ll ride their coattails and help forward the message.

Be responsive. You can’t hide in social media. If someone is complaining, thank them for sharing the information. Let them know what they are saying is concerning to you and provide a number they can call to have the issue resolved.

Be consistent. Plan to post at least a couple of times per week. Schedule your posts ahead of time but be flexible to adjust plans and take advantage of opportunities that arise.

Be nimble. Just because something is successful once doesn’t mean you can go back to the well. Keep adapting and experimenting. Don’t get stale.

Be excited and positive! Your passion and values will shine through.

Be human, be likable. Social media is all about engaging and connecting with your audience, so let some personality into your post.

Be local. Avoid stock photos that are clearly not from your community. Beyond the production of biosolids, look to imagery that shows the positive results of beneficial biosolids use. Pick photos you know your audience will enjoy. Think food, farms, gardens, and trees.

Include people in the photos and videos you post. People like looking at other people. Photos get 50% more likes, 100% more comments, and 80% more click-throughs.

Understand different platforms. Facebook, Twitter, Instagram, etc. have different strengths and weaknesses and users have different expectations. Be sure you’re using each platform effectively.

Appeal to emotion. Consider messages that convey how biosolids are a safe and effective way to return valuable nutrients to the earth. Protecting the planet is important to all of us, which is why there is so much focus today on producing the highest quality biosolids possible. What we are doing today will help fight climate change and benefit us, our children, and our children’s children.

Use a call-to-action. Include links or ways for audiences to learn more.
### Social Media Do’s and Don’ts

<table>
<thead>
<tr>
<th>Do</th>
<th>Don’t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respond quickly – within hours</td>
<td>Wait and see and respond days later</td>
</tr>
<tr>
<td>Take the conversation offline</td>
<td>Engage with the person extensively on the platform about their concern</td>
</tr>
<tr>
<td>Use a human tone expressing empathy</td>
<td>Respond in “corporate speak”</td>
</tr>
<tr>
<td>Tailor your responses to the comment</td>
<td>Make the same generic response to every comment</td>
</tr>
<tr>
<td>Assume good intent</td>
<td>Take comments personally and respond in kind</td>
</tr>
<tr>
<td>Look into the issue quickly and post the resolution</td>
<td>Ignore the issue</td>
</tr>
<tr>
<td>Allow negative comments to be posted (if it meets your policy)</td>
<td>Delete negative comments</td>
</tr>
<tr>
<td>Monitor all your comments</td>
<td>“Set it and forget it” and check on your social media accounts infrequently</td>
</tr>
<tr>
<td>Thank positive commenters</td>
<td>Ignore those that take the time to tell you you’re doing a good job</td>
</tr>
</tbody>
</table>

### GROUND LEVEL
- Start by retweeting/liking/sharing posts from other respected biosolids producers in your area and from across the country. You’ll be sharing effective messages that will help to increase awareness and engagement.
- Monitor feedback and engagement — provide thoughtful responses to comments and feedback.

### SUBSURFACE
- Monitor others’ posts, likes, reshares, and comments as above.
- Set a goal to share one original post per week on a topic that’s most pertinent to that week. Use lots of photographs and graphics and don’t forget to monitor and respond when appropriate.

### DIG DEEP
- Set a goal to make daily posts, using a modest budget to boost some posts at least monthly.
- Prioritize the use of photographs, graphics, and short videos.
- Develop and stick to a content calendar to help you plan posts that are relevant for the time frame to your audiences. A content calendar is a simple calendar (you can download a template in Word) that you fill in, in advance, with the posts you plan to use for each day. This is a way to track what messages you plan to post on which days and ensures you cover all critical messages over the course of the month (safe, natural, environmental, economic, innovative). Be sure to include any relevant links or images you need with the posts, and don’t forget to consider the hashtags so they can be tracked and found by others interested in biosolids information.
How to “Boost” a Post

For communicators with budgets, and who are permitted to advertise, boosting (or paying for) a social media post is an effective way to vastly increase the number of people who see your material and ensure it gets in front of “all the eyes” and not just the eyes that follow you already. Social media companies have grown very sophisticated in their ability to target specific audiences, while making your ability to cast a very specific net a fairly simple, straightforward task. For the budget-conscious, have no fear; it is typical for a few dollars to increase daily views of posts by 1,000 or more.

Depending on the platform, you can tailor your reach to desired audiences based on factors such as age group, location, interests and gender. But be careful; some platforms will filter interests over geography. Geography is your most important filter, so be sure to select that first. You can specify exactly how long your boost will last, or set a not-to-exceed dollar figure to protect your budget.

Post boosting varies by platform and the specific steps change rapidly, so look for tutorials available on each platform for specific how-tos.

10 STEPS TO Boost a Facebook Post

1. Go to your Facebook Page.
2. Find the post you want to boost.
3. Select ‘Boost Post.’ You can find it in the bottom-right corner of your post. Note: If you are unable to select Boost Post, boosting may be unavailable for this post.
4. Fill in the details for your boosted post. Facebook will automatically use images and text from your post, but you can choose your audience, budget, and duration.
5. Choose an audience or create a new audience based on specific traits. Note: It’s best to select this based on geography — the area of people you want to reach.
6. Select a recommended budget or provide a custom budget. Start small. You can always add money later.
7. Select one of the suggested time frames or provide a specific end date. You should be able to see engagement after just a week. If you don’t see a change, consider tweaking the post or adding funds.
8. Insert your payment method. Facebook will hold onto your credit card number for future posts and you can change it at any time.
9. When you’re done, select ‘Boost.’
10. Track the metrics for the duration of the boost.
Advertising
Advertising is found most everywhere you look — billboards, bus stops and benches, printed publications, tractor-trailers, banners towed behind planes, websites, Kindle e-reader lock screens, on television, on radio, during podcasts — the list is endless. Depending on your goals and budget, paid advertising should be considered a part of your communications toolkit because it enables two key things that other channels do not: You completely control the content and you can target precisely who sees it.

A handful of advertising pros and cons include:

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can reach a specific set of stakeholders simultaneously</td>
<td>Results are not guaranteed</td>
</tr>
<tr>
<td>Good for issue explanation</td>
<td>Difficult to compete with other ads</td>
</tr>
<tr>
<td>You have control of your message, along with when and where it appears</td>
<td>Can be expensive to produce and purchase space or time</td>
</tr>
<tr>
<td>Whether publications admit it or not, advertising can positively impact editorial coverage</td>
<td>Like all messages, must be seen multiple times before message absorption/understanding</td>
</tr>
</tbody>
</table>

Planning and Placing an Ad:
1. First rule: your audience determines where to advertise. In your research, you should determine where they are and aim to be in those channels of communication.
2. Research the costs and what kind of specifications (size and file type) are needed, as well as any deadlines, if applicable.
3. Develop content to match the space available.
   - Use the simple terminology we’ve provided here
   - Tell them about the benefits of biosolids: What is in it for them?
   - For visual media, use positive, colorful imagery with people
   - Provide a call-to-action — tell them what you want them to do. It can be as simple as “visit our website at www.(yourwebsite).org for more information.”
4. Determine the frequency you want your ad to appear, keeping in mind messages — particularly in ads — must be seen/heard multiple times before they are absorbed.
5. If you are doing print advertising, contact the outlet’s advertising representative to develop a plan. Don’t be afraid to negotiate prices; as a government agency, you may be entitled to a discount.
6. It can be difficult to assess the value of a specific ad placed, especially if you are merely trying to increase awareness and understanding. Find other ways to measure effectiveness, such as including a question in your next stakeholder survey asking them to tell you where they’ve seen your advertisements.
Taking Great Photos and Videos

Imagery is a core part of your toolkit. It’s essential for storytelling and connecting with audiences. Today, it’s easier than ever to capture testimonials and storytelling opportunities through smartphones and computers from anywhere in the world. When reaching out to an individual to provide an image or a video testimonial, the following guidelines will help ensure you receive a usable and quality file.

- **Horizontal orientation**
  While still images can be taken either vertically or horizontally, you need to record videos horizontally. This provides the best opportunity to crop an image to best match the space.

- **Positioning - Centered and Standing**
  Individuals should center themselves in the middle of the shot and they should be standing because we naturally tend to slouch when we sit. Position the camera to capture the speaker from between the belly button and just below the shoulder and make sure there is a little bit of space at the top of the frame. That provides an opportunity to crop the image if needed.

- **Where to Look**
  Always have subjects look straight into the camera.

- **Prop Your Camera.**
  To avoid a shaky video, we recommend you use a stand rather than hold your camera by hand.

- **Lighting**
  Use as much natural light as possible but do watch out for harsh backlighting that will make you hard to see.

- **Sound**
  Be sure to record in a quiet area to ensure that there are no distracting noises that may interfere with the sound (i.e. traffic).

- **Location**
  Look for opportunities to film outdoors or near a window. Natural lighting is best but if outside is noisy, inside works great, too. Just note the background and avoid areas that have an overall busy background or pattern.

- **Wardrobe**
  Like your background, your wardrobe should also be simple. Avoid heavy graphical patterns and avoid clothing with logos on the front unless it’s your utility’s logo.

- **Format**
  To ensure a high-quality video, we recommend you set your phone to record in HD 1920x1080. This may yield a large file. If you need to email your video, free transfer services such as WeTransfer or DropBox can help.
Message Guidance

Research shows that people respond positively to messages about the safety and economic benefits of biosolids but don’t be overly positive or embellish messages. Your credibility is important so all messaging must be fact-based and grounded in science.

Best practices related to messaging include:

- Refer to biosolids in neutral or positive terms as it relates to recycling, reuse and recovery of valuable nutrients and natural materials.
- Use consistent terms that are understandable to the general public.
- Focus on how a consumer can benefit from biosolids but avoid technical jargon. For example, consumers can relate to the need for an alternate, lower cost fuel source but probably won’t care about how anaerobic digestion works.

Audience-Specific Messaging

<table>
<thead>
<tr>
<th>Audience</th>
<th>Most Relevant Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Public – Current/Potential Opponents</td>
<td>Safety, Environment &amp; Economy</td>
</tr>
<tr>
<td>Regulators</td>
<td>Safety &amp; Environment</td>
</tr>
<tr>
<td>Elected Officials</td>
<td>Economy, Safety &amp; Environment</td>
</tr>
<tr>
<td>Agricultural Interests</td>
<td>Social &amp; Economic</td>
</tr>
<tr>
<td>Industry / Internal Audiences</td>
<td>Innovation, Safety &amp; Environment</td>
</tr>
<tr>
<td>Environmental Community/ NGOs</td>
<td>Environment &amp; Safety</td>
</tr>
</tbody>
</table>

Choosing the Right Words

Words matter and should be chosen carefully. This guidance is based upon original research conducted to understand messages around biosolids and from an in-depth analysis of media coverage discussing biosolids.

<table>
<thead>
<tr>
<th>Words that are Relatable and Understandable</th>
<th>Words to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reuse</td>
<td>Sludge</td>
</tr>
<tr>
<td>Recycling</td>
<td>Anaerobic</td>
</tr>
<tr>
<td>Recovery</td>
<td>Digestion</td>
</tr>
<tr>
<td>Products</td>
<td>Toxic</td>
</tr>
<tr>
<td>Nutrients</td>
<td>Dumping</td>
</tr>
<tr>
<td>Economic</td>
<td>Organic</td>
</tr>
<tr>
<td>Affordable</td>
<td>Humanure</td>
</tr>
<tr>
<td>Natural</td>
<td>Disposal</td>
</tr>
<tr>
<td>Greenhouse gas</td>
<td>Effluent</td>
</tr>
<tr>
<td>Earth-friendly</td>
<td>Carbon</td>
</tr>
<tr>
<td>Safe</td>
<td>sequestration</td>
</tr>
</tbody>
</table>
Message Platform
Most of the messages provided here were part of WEF’s original Biosolids Messaging Book and were developed based on extensive qualitative and quantitative research.

Biosolids are a complex, scientific concept and not readily understood by most consumers. That’s why it’s vitally important that communication about biosolids uses simple terms most people can relate to. With that in mind, the following message platform can be used in all communications materials about biosolids, whether for website copy, brochures, fact sheets, bill inserts or presentations. This message platform has been tested using the CDC’s Clear Communication Index (www.cdc.gov/ccindex/index.html).

Key Overarching Message
Biosolids begin as waste—your poop to be exact. Scientists developed a wastewater treatment process that turns what you flush into valuable nutrients and renewable energy. This is a safe, inexpensive way to keep your utility bill low, improve our environment, and provide farmers with better soil.

Proof points
• Biosolids are a safe, natural, and endlessly renewable resource that improves our environment, lowers costs of wastewater treatment, and supports farmers.
• Biosolids are an innovative way we recycle human poop into renewable energy and resources.
• Utilities across the country have been safely making biosolids for decades.
<table>
<thead>
<tr>
<th>KEY MESSAGE</th>
<th>PROOF POINT 1</th>
<th>PROOF POINT 2</th>
<th>KEYWORD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biosolids are a natural and renewable resource</td>
<td>Biosolids are loaded with nutrients that are better for the environment than chemical fertilizers.</td>
<td>The energy contained in biosolids is so great that wastewater treatment becomes a net energy producer</td>
<td>Natural</td>
</tr>
<tr>
<td>The production and use of biosolids reduces waste</td>
<td>Using biosolids helps keep them out of landfills.</td>
<td>It reduces the production of chemical fertilizers, which have their own waste stream.</td>
<td>Renewable</td>
</tr>
<tr>
<td>Using biosolids lowers greenhouse gas emissions</td>
<td>Using biosolids on farms helps soils store carbon, which reduces greenhouse gases by keeping it out of the air.</td>
<td>Biosolid use reduces the need for chemical fertilizers, whose production and use creates greenhouse gas emissions.</td>
<td>Sustainable</td>
</tr>
<tr>
<td>Biosolids generate renewable energy</td>
<td>The production of biosolids allows utilities to create a natural fuel that can be used for heat and power.</td>
<td>Using energy from biosolids could meet 12% of U.S. electricity demand.</td>
<td>Renewable</td>
</tr>
<tr>
<td>Biosolids help create resilient local economies</td>
<td>Farmers save money using biosolids because they are cheaper than chemical fertilizers.</td>
<td>Using biosolids helps keep wastewater treatment costs lower for customers.</td>
<td>Economical</td>
</tr>
<tr>
<td>Biosolids help beautify communities affordably.</td>
<td>Biosolids are a less expensive alternative to chemical fertilizers for healthy, community gardens, golf courses, and municipal parks.</td>
<td>Biosolids are often provided free to the community, or at a greatly reduced cost, compared to other similar products.</td>
<td>Economical</td>
</tr>
<tr>
<td>Biosolids improve soil health and increase crop yields</td>
<td>Biosolids have been shown to significantly increase the amount of corn grown.</td>
<td>In addition to boosting plant growth biosolids promote rapid tree growth, too.</td>
<td>Effective</td>
</tr>
<tr>
<td>Biosolids are regularly monitored for safety.</td>
<td>Biosolids are treated to meet standards set by EPA and state regulators and are regularly monitored.</td>
<td>Biosolids are treated rigorously to destroy harmful pathogens.</td>
<td>Healthy</td>
</tr>
<tr>
<td>Biosolids drive innovation.</td>
<td>Nearly 300 utilities in the U.S. are recovering energy from biosolids.</td>
<td>Biosolids can help meet increasing global demand for food.</td>
<td>Innovation</td>
</tr>
</tbody>
</table>
Environment

Key Message
Biosolids are a natural and endlessly renewable resource that conserves and protects our environment. Using biosolids reduces waste, recovers natural resources, generates renewable energy, lowers greenhouse gases, and improves the quality of water in our waterways.

Land & Water

Supporting Messages
• Biosolids are rich in the key nutrients needed to grow healthy plants.
• Biosolids are a proven and effective natural alternative to chemical fertilizers because they do more than just replace nutrients, they actually improve the health of the soil and allow for the slow release of key compounds like nitrogen and phosphorous.
• Using biosolids reduces the manufacture and use of chemical fertilizers, which can hurt the health of local water ways by contributing to algae growth.
• Biosolids hold water well, which helps reduce the amount of water needed to grow crops.
• Biosolids are an excellent addition to soil because they help grow plants quickly, reduce erosion and reduce the effects of runoff.
• Using biosolids rather than chemical fertilizers to reclaim large tracts of land helps restore the land to its more natural state and creates a better habitat for wild animals.

Additional Facts
• The EPA estimates that approximately 7 million tons of biosolids are generated daily by wastewater treatment facilities nationwide.
• Applying biosolids to farmland has been shown to increase carbon storage in soils and contribute significantly to the reduction of greenhouse gas emissions.
• In addition to boosting plant growth and improving soil health and land reclamation, biosolids have been found to promote rapid tree growth.
Supporting Messages

- Human poop is too valuable to waste. It’s loaded with vital nutrients essential to our environment and recycling it is beneficial to our economy.
- Using biosolids presents an opportunity to reduce the energy-intensive production and use of chemical fertilizers, which create their own waste streams.
- The production and use of biosolids helps municipalities reduce the amount of waste sent to landfills, which gives landfills a longer lifespan and reduces greenhouse gas emissions.
- Utilities that produce biosolids are able to reduce their operating costs and pass the savings on through lower costs for wastewater service.

Additional Facts

- More than 3.5 million tons of biosolids are kept out of U.S. landfills each year, instead of being beneficially reused in farms, in forests and to help restore land.
- Landfills release methane gas that must be dealt with by burning it or venting it, making them the third largest source of methane emissions in the US, only behind farming and natural gas.

Air

Supporting Messages

- Biosolids can be turned into natural biogas, which can replace fossil fuels and reduce greenhouse gas emissions that contribute to climate change.
- Biogas, made from biosolids, can be used for a variety of purposes including heating and electricity generation — both of which reduce costs to consumers while also reducing the need to purchase gas or other fuel to power facilities.
- The use of biosolids instead of chemical fertilizers reduces the amount of greenhouse gas emissions that occur in the production of chemical fertilizers.

Additional Facts

- If all existing wastewater treatment plants that treat biosolids recycled them into biogas, the reduction in fossil fuels would be equivalent to removing 430,000 cars off the road.
- Energy generated at U.S. wastewater treatment plants could meet 12% of U.S. electricity demand, equal to the annual power needs of New York City, Houston, Dallas, and Chicago.
- In Virginia, the city of Alexandria’s wastewater utility, AlexRenew, beneficially reuses 100% of their biosolids and generates enough biogas to heat nearly 800 homes per year.
Key Message
Biosolids are an important and growing part of creating resilient local economies, where resource recovery contributes to economic growth by creating jobs, reducing utility costs, and enabling renewable energy production.

Supporting Messages
• Biosolids are an important and growing part of making local economies resilient and strong.
• Farmers reduce their costs by using biosolids as a cost-effective way to safely and effectively fertilize crops, improve soil health, and increase crop yields compared to conventional chemical fertilizer.
• Communities across the country are experiencing higher costs for landfill space at the same time that additional space is becoming harder to obtain due to zoning and siting restrictions. When biosolids are pulled from the waste stream and turned into economically beneficial products, it extends the life of current landfills and reduces the need for expansion.
• The wastewater utility sector employs tens of thousands of people across the nation. By adopting biosolids use programs, utilities can provide additional employment in diverse fields like engineering, chemistry, biology, facility maintenance, and transportation.
• A key component in the production of biosolids is the generation of biogas, a natural process. Biogas can be used to heat facilities or as a fuel source to generate electricity. The savings generated from the production and use of biogas can directly benefit ratepayers by lowering utility bills through lower operational costs.
• Communities across the country use biosolids products to help maintain and beautify their local parks, recreational facilities and golf courses. Often biosolids are either free or offered at a greatly reduced cost compared to other similar products, thereby providing substantial savings to America’s cities and towns while enhancing public green spaces.

Additional Facts
• A University of Nebraska study found that biosolids increased crop yields (and therefore farm income).
• In Oakland, California, the East Bay Municipal Utility District’s production of biogas is saving the utility and its customers approximately $3 million annually by reducing its electric power purchases.
Key Message
Biosolids drive innovation within and beyond the wastewater sector by enabling the creation of new products, developing new resource recovery techniques and contributing substantially to the knowledge and expertise of the industry as a whole.

Supporting Messages
- Biosolids are revolutionizing the wastewater treatment industry, transforming it into a resource recovery system able to produce valuable products and capture while also generating energy to reduce operational costs.
- Biosolids programs demonstrate the viability and value of resource recovery and continuous improvement in new technologies, scientific methods and research.
- The creation of biogas from biosolids enables wastewater utilities to power their own operations or sell electricity to help reduce operational costs while reducing their own carbon emissions.

Additional Facts
- Nearly 300 facilities in the U.S. are recovering energy by converting their biogas to electricity.
- In 2015, DC Water became the first North American utility to use an innovative way to convert their biosolids into electricity. The system is providing one-third of their wastewater plant’s power, saving approximately $10 million annually in electricity costs, and an additional $13 million in trucking expenses and chemicals.
- In Oakland, California, the East Bay Municipal Utility District’s production of biogas is saving the utility approximately $3 million annually by reducing its electric power purchases.
- According to EPA, USDA, and the Department of Energy, with proper support, more than 11,000 additional biogas systems could be started, which would result in an estimated $33 billion for construction activity, 275,000 short-term construction jobs and 18,000 permanent jobs to build and run the systems.
Key Message

Farmers have been successfully using biosolids to grow crops for decades. Biosolids are regularly monitored to meet strict federal and state regulations and have been used safely for decades. Hundreds of academic and scientific studies have shown that biosolids are a safe and responsible alternative to chemical fertilizers.

Supporting Messages

- Biosolids are treated to exacting safety standards set by the EPA and state regulators and are monitored to ensure they meet the highest quality standards.
- Hundreds of studies over the course of decades have shown that biosolids are a safe and natural way to improve the health of our soils.
- Both EPA and The National Academy of Sciences have concluded that when all safety standards are followed for using biosolids in farming that produces crops that we eat, eating foods grown using biosolids is safe.
- There are two types of biosolids – Class A and Class B. Class A biosolids are treated to the highest standards, have zero detectable levels of pathogens, and are used directly as compost and on home gardens, lawns and other public spaces to promote healthy soil conditions and water retention.
- Class B biosolids are typically applied to farmland where the material is mixed with soil to help fertilize and condition the land for healthier crops. In many cases, farmers prefer Class B biosolids as they contain greater levels of plant-available nutrients.
Biosolids and PFAS

Key Message
PFAS are chemicals produced since the 1940s and are currently found in many common products such as household cleaners, food packaging, clothing, carpeting and beauty products. This includes household products like non-stick pans, coats that keep you dry, some dental flosses, and fire fighting foam. Because of this, PFAS are also present in our bodies, our environment, and biosolids. Studies show that our exposure to PFAS from these common household products is exponentially greater than our exposure to PFAS in biosolids. Studies have determined that contact with biosolids on farms and eating food grown with biosolids is safe.

Supporting Messages
• Wastewater utilities are at the forefront of research into PFAS in wastewater and biosolids to ensure they make smart decisions that protect our health and the safety of the nation’s waters.
• People’s exposure to PFAS from biosolids is unlikely and minimal. Risk assessments by many states have determined that direct contact, inhalation, or ingestion of typical biosolids pose no significant health risk.

References
Facts and data presented in the messages were developed using information obtained from the following agencies:
• North East Biosolids and Residuals Association (NEBRA)
• National Association of Clean Water Agencies (NACWA)
• National Biosolids Partnership, Water Environment Federation
• Oregon Association of Clean Water Agencies
• Milwaukee Metropolitan Sewerage District
• State of Washington Department of Ecology
• University of Nebraska-Lincoln
• University of South Australia Centre for Environmental Risk Assessment and Remediation
• U.S. Department of Agriculture
• U.S. Department of Energy
• U.S. Environmental Protection Agency
Step Three: IMPLEMENTATION

Strong organization and detailed project management are keys to any successful communications effort. You may have multiple communication tools and tactics reaching your stakeholders at the same time. Those with teammates contributing to — and taking responsibility for — campaign elements will need to work closely together to ensure proper sequencing of steps to meet objectives.
The implementation is often the “plan within the plan,” because it’s the place where you lay out all the steps you will take, by who and by when, to ensure success. A Gantt Chart or something similar is an indispensable tool for tracking everything. A table in a Word document works just as well. The software you use is not important. The important part is having a plan with tasks, the people needed, and deadlines that’s shared with all involved. A sample chart could look like this:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Who’s Responsible</th>
<th>Time frame for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft postcard text</td>
<td>Susan</td>
<td>January 15</td>
</tr>
<tr>
<td>Obtain approval</td>
<td>Susan’s supervisor</td>
<td>January 20</td>
</tr>
<tr>
<td>Design and printing</td>
<td>Graphic designer</td>
<td>January 20-30</td>
</tr>
<tr>
<td>Mail</td>
<td>Susan and vendor</td>
<td>February 1-5</td>
</tr>
</tbody>
</table>

Be sure to track all the steps and who’s responsible for each, plus a deadline, or at least the week the item is due (to give you flexibility if needed). A fourth column could be added to track resources needed, such as a software purchase or print shop vendor. You could also add a fifth column to show cost impacts, if desired.

**Beyond Communications to Engagement**

There’s communication and then there’s engagement. Where communication can be an engaging process of two-way exchange of facts and information, engagement goes a step further to seek stakeholder input into your actual decision-making process. Engagement is therefore very useful when you’re about to start a biosolids project, such as during the biosolids master plan process. As an example, here are the steps for conducting a stakeholder engagement process during the master plan process.

**Identify the Stakeholder Committee**

Before the project gets underway, identify a cross section of 12 to 15 people who can represent the interests of the community. Consider neighborhood groups that live within a half mile of the treatment plant; environmental groups; municipal oversight groups like a financial advisory committee; and other diverse interests.

- Decide what level of engagement you want. Use the [International Association of Public Participation’s (IAP2) Spectrum](#) on the next page for guidance.
- Plan a meeting schedule that aligns with project milestones.

For example, in meeting one, you’ll want to charter the committee and provide a primer on wastewater treatment. In this first meeting, it’s important you set a clear purpose for the group with intended outcomes, set expectations for information exchange, and set parameters for how you will tackle the work. One of your expectations should be that members report back what they learn to their respected groups and share their group’s feedback and questions at meetings. This is also the time to provide a basic background of the wastewater treatment process, including how the system collects, treats and returns the cleaned wastewater to the environment.
In meeting two you’ll likely want to discuss the project drivers and goals. Explain why you are considering a biosolids plan. Talk about the opportunities for technology in broad terms. Describe the potential markets. Show how other utilities in the region are handling biosolids for perspective. If a goal is to have their support or consensus on support, let them know that.

Plan out a series of meetings, quarterly, for the length of the project, ensuring you enable the stakeholders ample opportunity to weigh in on decisions before you make them. Each meeting should be no more than two hours, and done on a weeknight after work or a weekend, and varied to accommodate everyone’s schedule. Consider providing dinner, which can be simple boxed sandwiches. Aim to send the agenda and slide deck a week before each meeting and a meeting summary with all the Q&A within a week after. Create a project website and provide all meeting slide decks and summaries for all to review ensuring transparency throughout the process.

- Keep senior leadership and elected officials informed of the process and meetings.
- Capture a final report for senior leadership and elected officials that describes the process for engaging the stakeholders and the input they provided. Be sure to include how they felt about final decisions.

IAP2 Spectrum of Public Participation

<table>
<thead>
<tr>
<th>Goal</th>
<th>Promise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inform</td>
<td>“We will keep you informed.”</td>
</tr>
<tr>
<td>Consult</td>
<td>“We will listen to and acknowledge your concern.”</td>
</tr>
<tr>
<td>Involve</td>
<td>“We will work with you to ensure your concerns and aspirations are directly reflected in the decisions made.”</td>
</tr>
<tr>
<td>Collaborate</td>
<td>“We will look to you for advice and innovation and incorporate this in decisions as much as possible.”</td>
</tr>
<tr>
<td>Empower</td>
<td>“We will implement what you decide.”</td>
</tr>
</tbody>
</table>
If You Have Very Stinky Biosolids

For agencies with a high risk of nuisance complaints, such as very stinky biosolids, the best approach is an honest and proactive approach to the extent that’s possible. Get out into the community and make presentations, pass out brochures or fact sheets and business cards, offer kitchen table meetings, put up signs with phone numbers to call, and use the guidance here for working with the traditional media and social media. Try and get this done before the first truck delivers the odorous product. Determine where your biosolids fall on the spectrum of odors and mitigate the reaction with early, frequent, and honest communication about it. If you ignore the issue, minimize it, or leave it to the contractor to handle, you will risk your reputation and likely become the target of bad news. This can make it harder to get support for investments in treatment.

Determine where your biosolids fall on the spectrum of odors and mitigate the reaction with early, frequent, and honest communication about it.
Step Four: EVALUATION

Given busy schedules, finite resources, and the natural desire to move on to the next project, taking time to tabulate results during and at the end of a communications effort can be daunting but it’s so important. Skipping this step misses the opportunity to collect valuable feedback that can validate your effort and make your next push even more successful.
Here are some tips for evaluation:

**GROUND LEVEL**
- **Look back at your goals and objectives.** You should be able to compare your results against your goals and objectives to determine the degree of success.
- **Ask colleagues inside the organization to share their impressions of the effort.** Let them know you are open to their views on what went well and what didn’t go well.

**SUBSURFACE**
- **Develop a short online poll** and ask those in the public who participated in the process to give their feedback.
- **Note that outcomes are far more important than outputs.** In other words, don’t just measure how many news releases you sent out. Measure the number of stakeholders who were likely reached by the news coverage you secured by sending out a news release.
- **Dig into your traditional and social media metrics.**
  - How many people were reached in traditional media articles that were published/aired? What percent of these articles/stories included at least one of your key messages? Was the tone of these pieces positive, negative or balanced?
  - Compared to your baseline social media metrics, how was the engagement different on posts/tweets you sent as part of your campaign?

**DIG DEEP**
If you conducted a survey, interviews, or focus groups prior to your campaign effort, then do these same activities after your campaign (though consider giving yourself a full year of outreach before doing so). Ask the same questions to the same number of people and compare results. Make a note of where you made positive changes and continue the work that influenced that. Also note what didn’t change and adjust your approach the following year to address it.
Handling Difficult Conversations

In 2002, Daniel Kahneman and Vernon Smith won the Nobel Memorial Prize in Economic Sciences for research demonstrating that when fear is present, people process information differently in their brains, and the science of risk communication was born.

This research showed that when people are emotional, they shift their brains’ information processing from the hippocampus, where rational thoughts are generated, to the amygdala, the part of the brain that processes emotion. The only decision under consideration in the amygdala is how to be safe—should I flee, freeze or fight?

When you are speaking with someone—in person or through social media—who is angry or emotional, it is critical to remember that they are processing everything as a fight response necessary to keep them safe. Risk communication best practices are designed to make people feel safe enough to return to reasoned discourse where broader information and considerations beyond immediate safety can be applied to decisions.

The ability to connect with audiences who are angry or emotional is an increasingly valuable leadership skill. Utilities can significantly diminish the consequences of the spotlight by applying risk communication best practices both proactively and during a crisis.

Become the Trusted Source for Biosolids Information

Biosolids producers should strive to be the trusted source for information about biosolids in their communities. Trusted sources lead in times of crisis, are rarely targeted for a negative campaign and quickly and easily recover if they are targeted. In times of fear, uncertainty and complexity, people turn to trusted sources. Biosolids producers can become this trusted source through the guidance we’ve laid out in this toolkit: proactive, regular communication and engagement. The messages you share do not have to be slick, expensive, or hard to develop to be effective. Engaging in a proactive communication strategy will:

- Decrease the odds of being targeted by an advocacy group
- Increase your ease in responding effectively if you are targeted
- Increase your community’s understanding and support for the services you provide
- Increase your community’s perception of you as a leader and trusted source for information

The objective of risk communication is to return the conversation to one of reasoned discourse as quickly and easily as possible, while decreasing community angst and increasing your reputation as a trusted source for information about the production and beneficial use of biosolids.
Lack of communication sets you up to:

- Experience the worst if you find yourself in a media challenge
- Decrease community understanding and appreciation of the services you provide

Some of the most effective risk communication guidance comes from expert Vincent Covello of the Center for Risk Communication. Covello offers several templates for developing messaging that directly addresses perceived risk. For example, when confronted by a mother concerned about harmful substances in biosolids, instead of responding with facts, try the CAP approach:

1. **CARING CONCERN**: “I understand your concern about children’s health and land-applied biosolids. The health of children is important to me and one of the reasons I work at/run a clean water utility.”

2. **ACTIONS**: “Our facility has extensive treatment and monitoring programs to ensure the biosolids we produce are safe. Our data are shared in an open and transparent way with our state regulators and summarized and shared with our community at our website.”

3. **PERSPECTIVE**: We always meet the standards set by regulators. We pay close attention to emerging research and our concerns about safety are always focused on protecting public health and the environment.”

Using this approach, rather than a fact-filled defense, increases your odds that even if a mom leaves angry, she will also leave with an increased respect for you and your utility. This approach also does not escalate the emotion—another key objective of any engagement with people in a state of heightened anxiety.

**When responding to a high-concern question or statement, use the CAP Template:**

**Caring Message**
Provide a message indicating caring, concern, empathy of compassion. The message should communicate the seriousness of the situation.

**Action Message**
State actions you have or will take to address the issue or problem. For example, your message might indicate you are cooperating with regulatory agencies investigating the situation.

**Perspective Message**
Provide information that puts the issue in perspective or context.
Have a PFAS Plan

Some say that PFAS could be the greatest threat to biosolids programs. PFAS news stories can sometimes be one-sided, sensational and fear-inducing. The truth is, PFAS aren’t new, the amounts being reported are very small, and biosolids are not the primary exposure pathway for people. Nevertheless, consumers will hear and read scary things and believe that all biosolids are bad. You therefore need a clear, concise game plan to deal with this specific issue.

The CAP template above is a great way to structure the conversation when you are one-on-one with someone fearful of PFAS in biosolids. The guidance provided earlier, about how to deal with a negative “hit” piece in the media, is right for this, too. For larger, widespread inoculation of misinformation, nothing trumps the proactive approach — getting out early and often — and being the first to talk about it. Using the PFAS messages we provide in this guide, here are some ways to approach the conversation:

- Lead with messages that describe your expert and/or leadership role on the topic. Very few will have more knowledge about PFAS and biosolids or your expertise protecting public health, so use this positioning to your advantage.

- Once you establish yourselves as THE SOURCE for this type of information, remind your community that understanding this science and the regulations involved is your job and a key way you work for them. Let them know you are always there and available to speak to them. Encourage them to come to you first for the information.

- Last, provide that perspective. Make sure they understand what the advisories actually mean and share pictures and infographics to explain parts per trillion (the first six inches on a trip to the sun.)

- Keep at it. This is not a “one and done” conversation but something you will have to sustain and update as we learn more.

Keep at it. This is not a “one and done” conversation but something you will have to sustain and update as we learn more.
Case Studies

Invite Them In: The Power of Proactive Media Outreach

Metropolitan Water Reclamation District of Greater Chicago (MWRD)

It is common for the MWRD to invite the public, both opponents and supporters, elected officials, municipal leaders and Chicago-area media to tour its operations. An invitation to the Chicago Sun-Times to visit their facility resulted in a positive and balanced article and a chance for the MWRD to engage deeply with customers on social media on the topic. Here are some clips that reveal the conversation.

Link to the full article:

Chicago Sun-Times video:
https://www.youtube.com/watch?v=XsgnMAjgRV0#action=share.
The MWRD gives social media the same close attention it does the traditional media. Note that the MWRD’s communication team didn’t just post and walk away. They continued the conversation by responding in a timely fashion to each comment.

Metropolitan Water Reclamation District of Greater Chicago
July 30

A steady stream of visitors pulled up to flatten our pile of EQ Compost at the Stickney Water Reclamation Plant on Wednesday. These sustainable green thumbs are protecting the planet by reusing, recycling and replenishing, and now growing healthy gardens. So bring your own bucket and come visit our water reclamation plants. It’s free! https://mwrd.org/eq-compost #SustainableLiving
Hit Back on a Hit Piece
Great Lakes Water Authority

In late July, 2020, the Detroit Metro Times published the mother of all hit pieces on biosolids, Toilet to Table: Michigan farmers feed crops with ‘toxic brew’ of human and industrial waste. It was written by Tom Perkins, a journalist whom Great Lakes Water Authority Chief Public Affairs Officer Michelle A. Zdrodowski says came with a narrative already in his head.

When Perkins’ call came into GLWA, Zdrodowski worked with him to answer all of his questions. She provided extensive information about what they were doing from an industrial pretreatment program perspective, and shared their new PFAS program. By all accounts, Zdrodowski and her team did everything right. They were responsive, transparent, and complete. None of their information was included in the story, though. This just shows that sometimes, despite doing everything right, things can go wrong.

Zdrodowski and her team did the best response to the article, given the circumstances. They chose not to reach out to Perkins directly to correct him, because they didn’t want to risk extending the story. Instead they created an FAQ on their biosolids program on their website to directly combat his claims, and they shared that with their member partners and on social media. Their goal was to take control of their own narrative.

Visit GLWA’s website to see the FAQ they developed in response to the article, www.glwater.org.
Build It, And Know When to Walk Away
King County, Washington

Biosolids are not new to the Wastewater Treatment Division of King County, Washington. They began their biosolids program in the 1970’s and launched their Loop® brand in 2012. King County’s Biosolids Program has taken a very proactive approach to education and outreach about biosolids. Their advice to other utilities is to be proud of it, to consider it a valued commodity. The King County Biosolids Program’s full team approach emphasizes education through school curriculum, an education center at the wastewater treatment plant, workshops, and tours. Throughout the year, their educators and staff spend a lot of time in the community teaching and talking to others. Some of their more successful strategies have been:

**Vehicle Branding** – King County Biosolids Program has brightly branded, clean Loop trucks to support the message that Loop is a valuable product. The county made sure to create icons and images to represent the product so that it becomes very recognizable.

**An External Website** – Given the design constraints that many local governments have when creating a website, the King County Biosolids Program team built one separate from the local government site. This gave them freedom and platform they had brand ownership over, at [www.loopforyoursoil.com](http://www.loopforyoursoil.com).

**Robust Communication Tools** – The King County Biosolids Program took the time to create a “brand platform” with brand elements and specific brand messaging as its foundation. They use lots of videos and visuals to support their communication strategies. Though the brand required initial investment, they have more than reaped its value; having used, reused and repackaged its elements over the last eight years.

**Outreach and Education**
The King County Biosolids Program is well equipped to educate people about biosolids and to work through any questions. They have partnered with some of the most trusted sources of information, academia, to proactively promote biosolids with positive, factual information. They rely heavily on a robust arsenal of fact sheets, FAQs, published papers, and lab and field trials.

The King County Biosolids Program’s team of social scientists and communicators have found that providing fact vs myth information or engaging repeatedly with strong opponents typically doesn’t work, and often makes the situation worse. Instead, the King County Biosolids Program focuses outreach and education about the benefits of biosolids to a much larger group of people, the group
that just doesn’t know a lot about biosolids, and uses trusted scientists, researchers, and community partners to champion their product and program.

When opponents cause a ruckus, especially online, the King County Biosolids Program does not usually intervene (unless answering a direct question to King County), because it draws negative attention not positive. Instead, they keep an eye on it and ensure their messaging is adequately addressing any misinformation presented. If a farmer’s neighbor is really concerned about biosolids where the King County Biosolids Program or their customers were planning to apply them, their response is to leverage trusted community partners and to talk with that person, answer their questions and provide data. After receiving this information, if the person still isn’t comfortable, the Biosolids Program will try to respect that neighbor’s position and may not apply Loop near their home. They’ll find a different place. They have found it’s better to focus on their successes and let those happy customers help them influence others. As a result, they have a successful program with a waiting list of farmers who want their product.
APPENDIX 1:
Sample FAQ/ Fact Sheet

**What are biosolids?**
Biosolids are a natural, safe, and endlessly renewable resource that improves our environment, lowers costs to consumers, and strengthens our farming communities. Loaded with vital nutrients, biosolids are an efficient and effective way to capture value from human poop while generating renewable energy and resources.

**Where do biosolids come from?**
Clean water utilities across the country have been safely creating biosolids for decades, delivering innovative solutions that lead to stronger, more sustainable and resilient communities.

**Who uses biosolids?**
Farmers and gardeners are the biggest users of biosolids—they used more than half of the biosolids produced by clean water utilities in 2019 according to the EPA. Parks and golf courses are other large users of biosolids. About a quarter of all biosolids are burned for energy and the resulting ash can be used as a filler in concrete and brick manufacturing, for road construction, and much more.

**What are the beneficial uses of biosolids?**
Because biosolids are loaded with nitrogen, phosphorus, and many other key nutrients needed to grow plants, the most popular use is as compost or natural fertilizer to improve soil for farms and home gardens. Biosolids can also be converted to biogas to be used for heat, power, or vehicle fuel.

**Are biosolids safe?**
Food grown using biosolids is safe to eat, and it’s safe to play on parks and golf courses where biosolids are used to improve the health of the turf. Biosolids have been used safely for decades. Biosolids are regularly monitored to ensure they comply with federal and state regulations. Hundreds of academic and scientific studies have shown that biosolids are a safe and responsible alternative to chemical or animal fertilizers.

**How do biosolids help fight climate change?**
Applying biosolids to farmland has been shown to increase the soils’ ability to store carbon, which keeps it out of the atmosphere, helping to reduce greenhouse gas emissions. The use of biosolids also reduces the need for chemical fertilizers, which contribute significant amounts of greenhouse gas emissions when they are manufactured and used.
How do biosolids create renewable energy?
Renewable energy in the form of biogas is created as part of some biosolid production processes. Nearly 300 clean water utilities in the U.S. are recovering energy by converting their biogas to electricity. It is estimated that energy created at U.S. clean water utilities could meet 12% of U.S. electricity demand, the equivalent of all annual power needs of New York City, Houston, Dallas, and Chicago.

Why do farmers and home gardeners prefer biosolids over chemical fertilizers?
Rich in nutrients, biosolids actually improve the health of the soil and allows for the slow release of key compounds like nitrogen and phosphorous; key nutrients needed to grow healthy plants.

What are the economic benefits of using biosolids?
Biosolids are an important and growing part of creating resilient local economies, where resource recovery contributes to economic growth by creating jobs, reducing utility costs that benefits customers of clean water utilities, and enabling renewable energy production.

How do biosolids reduce costs for customers of clean water utilities?
When biosolids are converted to biogas and the biogas helps the plant generate power or heat for its operations, this lowers the utility’s operations costs, and those savings can be passed on to customers.

What are the different types, or classes, of biosolids?
The EPA categorizes biosolids as Class A, Class A EQ (Exceptional Quality) and Class B. The difference between these types depends on the quality of the material and the distinction helps ensure safe use. Class A EQ are the highest quality of biosolids and approved for use in gardens that grow food. Class A biosolids are the next highest level quality. They can be applied to gardens safely with no restrictions, and are popular among home gardeners as compost or fertilizer. Class B biosolids are lower quality than Class A but are still approved as a compost or soil improvement for farmland with permits and regular monitoring.
Appendix 2: Cheat Sheet for Pushback from Public and Press

**They Say:** Biosolids are stinky.

**You Say:** Biosolids that are used by backyard or community gardeners may have a slight earthy smell. Biosolids used by large-scale farming operations may have a smell comparable to animal manure, but this odor quickly fades after the material has been applied.

**They Say:** Biosolids contain heavy metals.

**Reality:** Biosolids contain very low levels of metals. The composition of metals is actually very similar to what is already found in soils in urban areas. The levels are well below anything that would pose a risk to your health.

**They Say:** Dangerous levels of so-called “forever chemicals,” commonly known as PFAS, are found in biosolids, making the food grown with them to be dangerous to human health and the livestock that feeds on crops grown with biosolids.

**You Say:** Biosolids have trace amounts of PFAS, measured in parts per trillion, (like one second in 32,000 years), and these numbers are getting even smaller as these chemicals continue to be discontinued.

**They Say:** Biosolids include untreated human waste.

**You Say:** Biosolids are produced during the wastewater treatment process. It is true that human waste – poop – is a primary ingredient of biosolids but by the time the biosolids are applied to farms, the poop has been treated and turned into a safe alternative to chemical fertilizer.

**They Say:** Turning biosolids into a safe soil amendment is costlier to do than to landfill them.

**You Say:** Not always true. Communities across the country are experiencing higher costs for landfill space at the same time that additional space is becoming harder to obtain due to zoning and siting restrictions. When biosolids are pulled from the waste stream and turned into economically beneficial products, it extends the life of current landfills and reduces the need for expansion. When you consider the full cost of landfilling, as well as the environmental cost, applying biosolids to farms is the less expensive choice.

**They Say:** The production of biosolids is bad for the environment.

**You Say:** The opposite is true. Biosolids are a natural and endlessly renewable resource that conserves and protects our environment. Using biosolids reduces waste, recovers natural resources, generates renewable energy, lowers greenhouse gases, and improves the quality of water in our waterways.
Appendix 3:
Sample Opinion Editorial (Op-Ed)

The Science Behind Your Produce Section

The next time you pass through the produce section at your grocery store, take a look around for a second. Everywhere you turn, there are fruits and vegetables, all in abundant amounts. Local farmers are the backbone of our food supply, delivering their harvests to our tables. What many of us don’t know is how we, the people without the green thumbs, lend a helping hand to that bounty.

The waste we produce every day – our poop – is the raw material used to create biosolids, a natural product that improves our soils and provides us with packed produce shelves. Biosolids are formed during the wastewater treatment process and they contain vital nutrients that boost local farm yields while reducing the need for chemical fertilizers.

The benefits of biosolids are wide-ranging and they don’t stop at the supermarket checkout. For people with environmental concerns, biosolids allow for the slow release of essential nutrients like nitrogen and phosphorus. They spare our local waterways from an influx of fertilizers, which can cause devastating algal blooms that choke off aquatic life.

Because of their makeup, biosolids are an endlessly renewable resource that reduces greenhouse gas emissions. They also retain water well, cutting down on erosion while conserving a substantial amount of our water supply.

For people focused on financial matters, biosolids offer significant economic benefits. They are an inexpensive resource for greater growth. Corn, in particular, flourishes with biosolids. As a result of the boosted harvests created by corn, local farmers have more product to sell and consumers receive a healthier product at a lower price.

Then there are the comprehensive benefits biosolids provide to us here at [UTILITY NAME]. Utilities have three options when it comes to dealing with our biosolids: take them to landfills, burn them, or sell them. When we sell our biosolids, we eliminate the need to take our waste to the local dumpsites, which is not only costly but takes up valuable space. Burning them has the potential to produce natural energy or gas, but that’s only useful is there is a local market for it.

Bringing our biosolids to market is a green choice and their sale provides us with added revenue and reduced operational costs. That combination helps us keep your wastewater bills lower than they would’ve been.

When it comes to the safety of biosolids, we regularly monitor them to make sure they meet the strictest federal and state health standards. Hundreds of scientific studies have shown that biosolids are a safe and a responsible alternative to chemical fertilizers.
In recent months, potentially hazardous compounds called PFAS have been discovered in some of our nation’s biosolids. These substances are used in thousands of consumer products we enjoy every day. As a result, they are being detected in biosolids in parts-per-trillion amounts. For some perspective, a part-per-trillion is equal to one second out of 32,000 years. At this level, exposure through farmed food is exponentially smaller than cooking with Teflon-coated pans, eating fast food, using certain brands of dental floss, or even consuming cake made from store-bought mixes, all products which all contain PFAS.

I understand this is a complex topic, so my team is here to help you understand the issue even further. I invite you to visit our website – INSERT WEBSITE – or you can contact us INSERT PHONE AND EMAIL for more information.

Signed,

Your Utility Executive
Appendix 4: Design Elements

- Farms
- Gardens
- Energy
- Safety
- Environment
- Climate Change
- Clean Air
- Economic
- Innovation
Image Library + Guidance

One of the most effective and compelling tools for expressing the story of biosolids is the use of quality, engaging photography.

We encourage you to showcase the results of biosolid use in agricultural crops, bioenergy and innovative practices. Photography should be high resolution for quality printing purposes. If original photography is unavailable, photography libraries such as gettyimages.com, istockphoto.com and shutterstock.com provide excellent resources for purchasable photography. The following images are a sample of the style that could be used in your materials.
Sample Social Media Posts

### Instagram Images

- **Biosolids improve soil health and increase crop yields better than chemical fertilizers do.**
- **Biosolids generate enough energy to power cities like New York.**
- **Every academic research study proves that Class A biosolids are safe for use as compost in your garden.**
- **Using biosolids saves farmers money, creates jobs, and lowers treatment costs.**
- **Biosolids are a renewable resource that can be used to create heat and power.**
- **Burning biosolids improves air quality as much as removing nearly half a million cars from our roads.**

**1080x1080 PIXELS**

### Facebook Images

- **From farm to table to farm!**
  Biosolids improve soil health and increase crop yields better than chemical fertilizers do.
- **Our poop has power!**
  Biosolids generate enough energy to power cities like New York.
- **Safe for gardens!**
  Every academic research study proves that Class A biosolids are safe for use as compost in your garden.
- **Can you say, pay dirt?**
  Using biosolids saves farmers money, creates jobs, and lowers treatment costs.
- **Wait, poop can do that?**
  Biosolids are a renewable resource that can be used to create heat and power.
- **Biosolids burn cleaner!**
  Burning biosolids improves air quality as much as removing nearly half a million cars from our roads.

**1920x1080 PIXELS**
Bill Insert Template

Large Title Will Go Here
Subtitle Will Go Here
Insert your message here...

Learn more: XXX.XXX.XXXX
www.webaddressgoeshere.com

Large Title Will Go Here
Subtitle Will Go Here
Insert your message here...

Learn more: XXX.XXX.XXXX
www.webaddressgoeshere.com

Large Title Will Go Here
Subtitle Will Go Here
Insert your message here...

Learn more: XXX.XXX.XXXX
www.webaddressgoeshere.com
Fact Sheet Template

Large Title Here

Subtitle to Go Here

Insert your message here...

The difference between Class A and B Biosolids

**CLASS A**
- Virtually undetectable bacteria levels
- Extremely low metals
- Very little odor

**CLASS A EXCEPTIONAL**
- Not only meets Class A conditions, but exceeds quality in every respect

**CLASS B**
- Low levels of metal that are similar to what’s already found in soil.
- Very low levels of bacteria.
- Smells like animal manure during application, but odor fades quickly.

Used by:
- **Home Gardeners and the General Public**
- **Farmers**

under strict guidelines to meet state and federal regulations
Fact Sheet Template

Large Title Here

Subtitle to Go Here
Insert your message here…

Subtitle to Go Here
Insert your message here…

Subtitle to Go Here
Insert your message here…

Subtitle to Go Here
Insert your message here…
Rack Card Template
Rack Card Template

Large Title Here

Insert your message here...

Learn more: XXX.XXX.XXXX
www.webaddressgoeshere.com

Learn more: XXX.XXX.XXXX
www.webaddressgoeshere.com

Learn more: XXX.XXX.XXXX
www.webaddressgoeshere.com
Visual Asset Guidelines
A Brand Guide to Promoting Biosolids in Your Community

The following provides an overview of the visual assets for Promoting Biosolids in Your Community. This guide has been developed to ensure an accurate and appropriate use of visual elements for consistency. This guide serves as an aid for any organization which uses the resources and templates provided in the Promoting Biosolids in Your Community Resource Guide.

Typography
The following typography has been selected for the resource templates. These fonts were selected based on their ready availability in Microsoft platforms including Word and PowerPoint.

Color Palette
The color palette includes primary and secondary colors. The primary color palette’s emphasis on blue and green hues comes from our visual positing that supports nature and science. The secondary colors were chosen to complement the primary palette and provide a selection of accent colors to enhance the visual experience.

NOTE: The color values identified in this guide were generated in either InDesign CC, or Illustrator CC in a CMYK color space. Colors may slightly vary depending upon the programs in which the document is opened. All new designs should begin with these values.