REUSE. REPAIR. REPURPOSE. REIMAGINE.























ACKNOWLEDGEMENTS

The writing of this document and much of the research herein was made possible through a Minnesota Pollution Control Agency Environmental Assistance Grant.

Authors and Contributors:

Zandra Zwiebel, WLSSD Environmental Program Coordinator Lorilee Blais, WLSSD Environmental Program Coordinator Karen Anderson, WLSSD Director of Community Relations Heidi Ringhofer, WLSSD Director of Solid Waste Services WLSSD Materials Recovery Center Staff

Western Lake Superior Sanitary District Duluth, MN

June 2017

BACKGROUND

Western Lake Superior Sanitary District (WLSSD) is the wastewater and solid waste authority for a 530 square mile area on the southwest shore of Lake Superior. Its service area includes Duluth, Cloquet, Proctor and Hermantown, MN and 13 surrounding communities. WLSSD operates a number of facilities to ensure the availability of proper waste management options in the region.

WLSSD operates its Materials Recovery Center (MRC) at the site of a decommissioned landfill. Opened in January 2002, its intent is to provide area residents with a disposal option for bulky and hard-to-manage materials, while recovering as many resources as possible from the waste delivered to the facility.

Initial efforts included the redirection of recyclables and regulated materials such as appliances, tires and electronics. Over time, this diversion practice expanded to include a permanent reuse area that offers reusable items such as furniture, construction materials, sporting goods, and personal use items. The purpose of the MRC Reuse Area has been to give usable items one last chance before final disposal.

Over time, WLSSD's successful program has grown to divert nearly 500 tons of material annually, an increase of more than eight times since 2013. Customer visits to the MRC Reuse Area have also increased five-fold to about 25,000 annually.

SCOPE

This document is intended to provide insight that might be useful when launching or modifying a reuse program that handes items of a quality that may not meet a standard to be managed through traditional reuse/resale locations. Each region and facility will have unique situations and goals. Use the information as is or adapt as needed.

Included in the guide are suggestions and examples of resources WLSSD used to evolve its successful reuse program. There are also suggestions meant to aid other communities in establishing a successful reuse program of their own. These suggestions are based in part on what WLSSD staff has learned while improving processes at the WLSSD's MRC Reuse Area to increase the amount of items reused and the number of customers served.

Each section of this document contains a brief overview and topics to think about:

- Section 1 Launching or Modifying a Reuse Program
- Section 2 General Program Operations
- Section 3 Reuse Facility Metrics and Documentation
- Section 4 Onsite Visual Aids and Signage
- Section 5 Public Education and Promotion
- Section 6 Summary and List of Recommendations
- Section 7 Appendices Informational Resources

LAUNCHING OR MODIFYING A REUSE PROGRAM



















OVERVIEW

Whether launching a new reuse program or modifying an existing one, its critical to bring together stakeholders to give consideration to all aspects of the program and its potential--ultimately developing a shared understaning. Contact and learn from existing reuse or resale organizations in the community. Its wise to speak with organizations and programs from farther venues if there are models that seems like a good fit for your organization. Consider what your program might offer that is not currently available from other reuse organizations.

Some key concepts will prevail. You will need a space designated for reuse (whether it is open-air, a building, or multiple buildings and shipping containers). You'll need a method for receiving and/or picking up reusable items. Depending on the set-up, you may need to have a cashier or attendant, liability waiver forms and rules for customers such as item and time limits. The right employees (customer-oriented, friendly, and creative) and a good training program will also be critical to success.

Similar to new programs, there are similar critical elements to expanding or changing an existing program: Start with a shared understanding or plan that includes input from pertinent stakeholders. You will also need to understand that historical influences, the location and layout of the facility, and your budget will be among the biggest drivers affecting capacity and outcomes.

If the program already exists, be sure to understand your waste stream before moving forward with an expansion. Knowing the material types and quantities you receive will help you to identify landfill abatement opportunities. A waste characterization study is extremely helpful, but if this is not possible, focus on how you can acquire solid data or good general information through simpler methods,

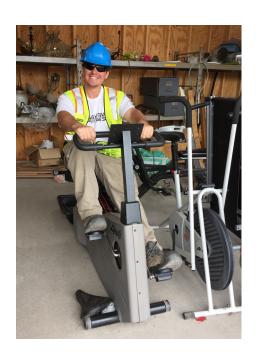
WHAT TO CONSIDER

Whether starting or modifying a reuse program, most of these following topics will apply in some fashion.

Existing program considerations:

- What items are currently being diverted, and what is being missed?
- What items are being reclaimed, and what is the end purpose?
- What materials are remaining unclaimed or overstocked, and why?
- Have you noted inherent problems with the current program, such as a potential to encourage hoarders, sustain bedbugs or mold, or other relevant concerns?

HOW DO WE CHANGE OUR EYES TO SEE TREASURE INSTEAD OF JUST TRASH?



When it still works, think 'reuse' instead of 'trash'.

Site considerations:

- Will the reuse program stand-alone or will it be associated with a waste disposal or materials recovery facility? How will reusable items come to the reuse program?
- How much space can be designated for the reuse program?
- What are the traffic flow options, both inside the reuse area and outside?
- How many parking spaces will be needed?
- What types of driving and walking surfaces exist? What amount of effort will be required to maintain them and/or what would upgrade entail?
- Are utilities available? This will affect lighting choices and the ability to have receptacles for testing electrical items, restroom facilities, etc.

Program considerations:

- Will drop-off be free or will you charge a fee to cover possible disposal?
- Will pick-up be free or will you charge a fee to help cover expenses?
- Will you require customers to sign liability forms?
- How will you handle returns? If there is no pick-up fee, maybe there will be no returns.
- What type of buildings and shelving are required?
- Will you require storage? Will items be stored seasonally (think holiday items that are displayed near the holidays but are otherwise stored)?
- What type of equipment is needed to operate the program? Will staff
 help customers to unload and load? Will there be moving devices for the
 customer to use (hand truck, scissor lift, etc)?
- How many employees are needed? What skill sets are most important for your reuse program? What kind of training will be needed?
- What types of support staff will be needed? When incorporating the
 reuse program with a waste disposal site, you might already have support
 staff. How will existing employees need to change their work processes

If you need to build your program over time, shipping containers are a reasonable option that can be added incrementally as needed. Roll-top doors can be placed midway to improve natural lighting.



to incorporate the reuse program? How will you handle contacts (email, telephone, etc.) and questions from the public? What information will staff need to know to successfully answer questions from the general public?

Addressed in more detail in the next several sections:

- How will you quantify the amount of material reused via the program, and what are the criteria to determine success or failure?
- What kinds of signage will help make the program successful?
- What types of education and promotion may be needed?

SUGGESTIONS

When firming up your plan, begin with your vision, then move on to the practical implementation. It is always good to start with a vision or plan in mind, but remain adaptable as circumstances, conditions, or even trends may force change.

Space and staffing will always be key. This is especially important when the reuse program is associated with a waste disposal or materials recovery facility. Design the reuse program with an eye to current traffic flow and what may happen in the future as the program grows. Growth should not negatively impact the other operations on site; rather, they should complement each other.

Be aware of the needs of the all aspects of operations when staffing the reuse program. Some overlap will be beneficial when cross-training employees. However, there will likely be a net gain in the number of employees at the site as a whole. A successful reuse program is by nature somewhat staff-intensive.

Sturdy shelving is a good investment. Be sure to purchase shelving that will hold up to your intended use. Understand weight ratings to ensure safety for employees and customers.



GENERAL PROGRAM OPERATIONS



















OVERVIEW

When a reuse program is associated with a waste disposal site, care is required to assure adequate staffing for the reuse program without hindering the overall operations. There must be a balance so all aspects run smoothly—good customer service, efficient traffic flow, and more. Regularly short-staffing either the waste disposal or reuse aspects of the facility does not work well when dealing with large numbers of customers. Part-time and seasonal staffing options should be considered to supplement full-time staff as you determine what level of staffing is needed to successfully run the entire operation.

Reuse program training is also very important and needs to be well planned from the outset. After a thorough initial training, there should be a periodic refresher that touches on topics of reccurring concern and changes that have been made to the program. You should have a written standard operating procedures (SOP) manual for employees to refer to as needed.

One of the most important concepts to share through training and on-thejob experience is about what types of items should go on the shelves in the reuse program. Getting employees to see the value of many of these materials (changing thoughts of trash to those of treasure) is important and really needs to be hands-on. Alternately, its important that staff understands what items actually might just be trash.

This is where cross-training becomes important. Working in the reuse area will help employees understand which items move and which do not—and what the quality actually is and is not. Some items may need serious repair, but there will be customers that look for these. After cross-training, employees working in other parts of the overall facility have a better idea of which additional items in vehicle loads can be directed into reuse. From the other end, reuse employees cross-training in the waste disposal areas will have the 'eye' to see items that may be brand-new to reuse (yes, the grungy wooden ladder really does go places—cut and incorporated into rustic crafts).

Even though the goal is to redirect as many items as possible into the reuse program, be aware of what types of things should not be reused and/or cannot be accepted. Incorporate these into the training program as well. Child safety



Is it reusable? Would someone take it?

items, like car seats, must go in the trash. Other child care items, such as cribs, may be trash based upon the age and style of the item (extremely old cribs do get repurposed and could be acceptable after removing the hardware). Used bicycle and ski helmets should also go in the trash.

As for items that cannot be accepted due to either illegal or illicit nature, also be prepared with a plan to handle these if they are noticed after a customer has departed. Some items of questionable taste (movies, books, etc), can be placed in the trash. Other items like pharmaceuticals, firearms, ammunition, and hazardous waste will need to be managed separatedly.

Good communication skills are critical for a successful reuse program. Employees will have a lot of one-on-one conversations with customers throughout the facility. These are very important for relaying key information (which will also be relayed via other methods of public education). For example, customers should sort loads to preserve the quality of items that may go to the reuse program. Additionally, this speeds up the process when disposing of waste items; employees can more quickly judge what is in a vehicle when materials are sorted for recycling, reuse and disposal.

Employees may need to handle customer service issues. They should receive specialized training and feel comfortable as the first point of contact to address issues, and should have available to them a supervisor who can come to their assistance if needed. Finally, communication between employees is also vital. A large open-air site will likely require radios or cell phones in order to relay information that is key to maintaining smooth operations.

WHAT TO CONSIDER

- The number of hours the site will be open will drive the number of employees needed and employee shifts.
- Will there be cross-training between the various areas of the waste disposal site and reuse program?
- How do you teach employees to recognize items that should go into the reuse program?
- Are there physical tools available for salvaging additional items from a
 waste area and moving them into the reuse area? If so, be sure to label
 the items clearly and store them securely when not in use so they are not
 mistaken as free reuse items by customers.
- How will employees know when items have met the end of their term in the reuse program and need disposal in the trash? What is the process to put them in the trash? Will this be tracked?

- How many is too many? Or, in other words, can you really put 50 doors on display in the reuse program or would 10-15 be better for your site?
- If there is storage capacity, when and how will it be used?
- How will you handle maintenance of the physical structures and land?
- How will you handle bad weather? Is there a notification process to let the public know when the site needs to close unexpectedly?
- How will you handle potential issues with customers? Will employees receive training to help them manage these issues?

SUGGESTIONS

- Develop a good training program. Update and provide refresher training as the program evolves. Cross-train so all employees are aware of all the aspects of reuse and disposal on site. Customers will expect all employees to be well-versed in all aspects of the facility. Also train about what types of information employees should be able to share with customers (about the reuse program and any other aspects of your organization—these employees are the faces of your organization). When identifying the skills needed by employees, be sure to include customer service.
- Have a good system of communication between the various areas of the site. Getting a heads up about the next load of material and what the customer should be doing with it is always helpful. Walkie-Talkies and radio systems can work well in many scenarios.
- Work as a team.
- Network with other reuse organizations that may be able to take surplus items if you find you are consistently having to move good, reusable items back to the trash for lack of space and a continuing influx of new material.

Balancing available space with display for the customer's eye. As the program goes full bore, staff time likely won't allow this; organization and signs are key.



REUSE FACILITY METRICS AND DOCUMENTATION



















OVERVIEW

The primary objective(s) of your reuse program should drive what you document, measure and track. For a reuse program associated with a waste disposal site, landfill abatement is likely important, right alongside customer counts. With higher quality reuse items at a resale or charitable location, your primary objective(s) may be quite different. Good data will help you understand how much waste is recovered or diverted from landfilling, whether or not you are reaching your goals, and when to allocate more resources to your program to continue successful, smooth operations.

As landfill abatement is typically measured by weight, some method of weighing outgoing items or a compiled weight list for a wide variety of items is needed. For example, without a large scale, you will never know the exact weight of every desk that is reclaimed, but an average weight can be determined with some research and documentation. With smaller items, a variety of the same type of items can be weighed and an average weight calculated.

Reuse customer counts can come from a receipt system, a tally clicker, or even by manually counting submitted liability waiver sheets. The percentage of reuse customers at a waste disposal site can be determined when data is tracked on all customers. This is a good figure to have when discussing changes for the program.

WHAT TO CONSIDER

- How much time is reasonable to spend tracking information?
- What decisions will be made based upon data trends?
- Can detailed data be collected indefinitely? If not, how long can it be collected to set a reasonable baseline?

SUGGESTIONS

Detailed data collection requires time for customers and for you, as well, to determine what the data reveals. Set a timeframe to collect detailed information. From there, decide if continued collection will be feasible and if the data is providing the answers needed to make informed decisions. Differentiate between what data you need to have and what you want to have if you need to make a change to ensure you're not wasting time and effort. A baseline or periodic check of weight data can be used to set average weights per customer for future tracking.

TOOLS

See the Appendices for samples of developed forms and weight data.

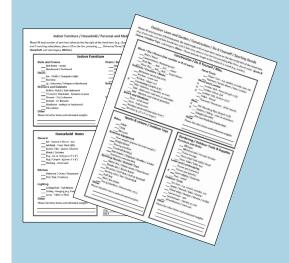
- One-time use Liability Waiver Form
- Frequent Visitor Reuse Card
- Reuse Data Collection Form
- Reuse Pass

BETTER DATA NEEDED

With the MRC, the existing receipt software was designed to track customer use of all aspects of the MRC. Staff know how many people use the MRC in addition to when and how they use it. Following is a list of some of the things collected data has been used for:

- Setting budgets
- Determine hiring needs
- Set employee shifts
- Set MRC hours
- Negotiate recycling contracts
- Scheduling contractor pickups

WLSSD's data fell short with a lack of well-tracked information about what customers take from the MRC Reuse Area and an efficient process by which those items translated into landfill abatement weight reports. There was also no way to document returning reuse customers except for anecdotal statements from gatehouse staff.



ONSITE VISUAL AIDS AND SIGNAGE



















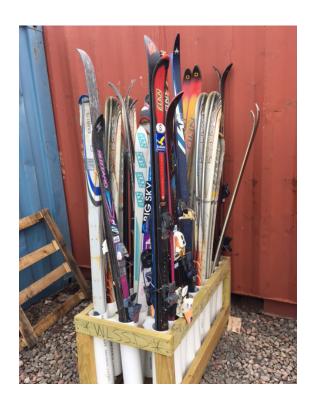
OVERVIEW

Just like at retail stores, reuse programs can benefit from appropriate placement of signage to help customers understand how and where to drop off items. It can also improve the shopping experience to make it easy for customers to find "treasures" and by conveying program rules about how it works.

Customers dropping off reusable items need to know where to go and where to put them. Maintaining a designated clutter-free area for vehicle unloading streamlines the traffic flow and is safer for customers and employees. Customers picking up items will need to know where to park to stay clear of other traffic at the waste disposal site.

If the reuse program is popular and busy, limits on items and shopping time may be needed to keep customers moving through the site. This is especially important if there is limited space and a lot of traffic. This information should be conveyed to customers using multiple methods.(signage, handouts, etc.)

Having clearly labeled areas based on item categories and an area labeled for check-out make for a faster shopping experience. When time allows, arranging items to better display them can help customers make selections—think impulse buy. This might be as simple as lining the couches in rows or could involve designing different display racks that fit the items, like a frame of PVC tubes for skis or golf clubs. Pallets can be used to create racks for sinks and countertops, making the job of picking out the best one really simple.



Items are easier to look through when displayed in an organized manner.

CONVEYING RULES

The MRC Reuse Area rules are conveyed in several ways onsite at the MRC and also on the WLSSD website. Onsite, MRC gatehouse staff explain the item limit and shopping time limit to each reuse customer. Traffic flow can be heavy, and the time limit helps keep customers moving through the entire facility.

Its also very important to have a rule about children being supervised.
WLSSD's busy reuse program is within a waste disposal site, there is heavy equipment traffic as well as customer traffic (sometimes with unwieldy trailers that can block lines of sight).

Multiple forms of communication contain the rules. This is important with a popular program structured for free shopping. The liability waiver that each reuse customer signs at the gatehouse lists all the rules. The time-stamped reuse pass that the customer takes to the Reuse Area also contains the 5 most important rules to remember. The frequent visitor card used by "very regular" customers also contains these rules. Signs are posted in the reuse buildings, as well.

There may be some items at a waste disposal site that could be reusable but do not get placed in the designated reuse area (things like major appliances, tires or electronics that cannot go in the waste and if collected at the site are kept in a separate area). Additional signs are needed to ensure customers are aware that these items can or cannot be taken, depending on if you set up your reuse program to include them or not.

Customers could find tires for trailers, get extra racks for a refrigerator, or take home a functioning TV for the deer hunting shack. Pallets commonly come to waste disposal sites and be set aside near a wood or brush pile rather than in the reuse area itself. Signage and corresponding printed and online information will help customers understand what items are approved to take for reuse.

WHAT TO CONSIDER

- Where is the best place to locate parking? How many parking spaces may be needed? If the reuse program is spread over a large area, is there capacity to set up several parking areas?
- Where does a customer park when dropping off reusable items if it is different from the regular parking area?
- Is there a primary spot to check out? How do customers check out?
- How are reusable items displayed?
- Is there a place designated to plug in and check lamps and other corded electric items?

Label each building. List what can be found in each building. These signs have sliders that can be moved to other buildings if it becomes necessary to reorganize.



SUGGESTIONS

- Designate an unloading or drop-off area for customers bringing in reusable items. This can be done with a simple sign or two. Marking the pavement at an outdoor location also helps.
- Label the buildings or areas in a large building (furniture, household décor, etc). If it is an outdoor facility with multiple buildings, identify them on a simple users' map.
- Once you have an organizational structure that works, label internal shelving. Use a system that allows staff to make easy changes if something move into a different area as you reorganize.
- Designate and label parking spaces. Mark out and label a handicappedonly space.
- Clearly designate the checkout area whether the customer drops off a completed form for free items or you have a program designed to accept payment. You are relying on this point for either data, payment or both.

Some items overlap into promotion or marketing, but as they are placed onsite, they fall into this section:

- Bulletin Board with Pinterest ideas and customer projects
- Do-it-yourself (DIY) posters these may be in a central location or could be placed in the areas where the highlighted items are found (a cold frame poster by the windows)
- Posters or photo gallery displaying actual customer projects

TOOLS

Within the Appendices are a series of posters that were designed for use within the MRC Reuse Area.

If you have time and space, arranging reuse items for display helps to move them faster. This red couch disappeared right after the photo was taken.



PUBLIC EDUCATION AND PROMOTION



















OVERVIEW

Reuse programs need education and promotion to operate successfully. Educate the general public about what can be diverted for reuse, where it can go, and how to maintain items' (remaining) quality during storage and transport. Be ready to promote the reuse program to increase the number of visitors and continue to increase the amount of items moving through the facility. Unless you have unlimited storage space, reuse items need to keep going home with customers in order to continue accepting fresh items into the program.

Know when people are most likely to dispose of items and develop a plan to make them aware of the reuse program when they need it. Spring and fall cleanups generate a lot of traffic for waste disposal. Moving also goes hand-in-hand with the need to get rid of "stuff". Seasonal newsletters can call attention to a variety of tasks; use these opportunities to remind people to think again about unwanted items before throwing them away.

If you have colleges in your community, there will be some move-in disposal flurries but much more during move-out. Move-in is also a time to remind students about reusable goods for furnishing and outfitting their apartments. Work with colleges to develop effective, yet low-cost (or free), posters that can be placed in college hallways and meeting spaces. Coordinate social media posts so college personnel can share them with the broader college audience. Contact college newspaper staff to place advertising or generate their interest in news articles.

General move-in/out of homes and apartments also triggers a lot of disposal. Reach out to Realtors® and rental associations with informational cards or brochures to distribute to new owners and renters. Consider doing the same with your local chamber of commerce and visitor's bureau—both places that newcomers will check with as they are planning to move to your community. Also, find out if there is an option to provide a link to your websites from these websites.

Filling your reuse program with stuff that people will take is only half the battle, however. Now you need to let people know what you have. Word of mouth is very effective but can be a long, slow method of building a brand-new program. This can be positive depending upon expected number of items and available staff. For a faster launch, press releases, news articles, social media posts, and advertisements may be needed.

With the reuse program at the WLSSD Materials Recovery Center, we also suggest arranging the load so our staff can clearly see what might be reusable. In addition to retaining quality, this speeds up the transaction time at the gatehouse and unloading time at the MRC Reuse Area.

In some instances, people may need to learn to look at reusable items with fresh eyes. A person may see a chipped sink and think it's just trash. Use visuals like posters, photos, and displays to show what a chipped sink could become—the center of a nifty, multi-purpose potting bench.

WHAT TO CONSIDER

- What types of outreach can you do based upon program goals and budget?
- Who is the target audience for general use of the program?
- Is the target audience to drop off reusable items the same as the audience that may shop for reusable items?
- What are the best methods to reach various audiences?
- What groups can you partner with to get word out to more people?

When you want people to reconsider throwing a reusable item away:

- Are there other reuse programs in the community? WLSSD is a public organization; the Reuse Area is the site of "last resort" for quite a few items that don't meet standards for other reuse programs in the community. Your education and promotion will vary depending upon this answer and the primary goals for starting your reuse program.
- Is it easy to drop-off items for reuse? What can be done to make it easier?

When you have reusable items to place:

- What types of items need to find homes and what types of individuals might be interested? How do you reach those individuals?
- How do you reach out to a niche audience to place reusable items (think garden clubs that could use flower pots)?

Showcasing reuse at public events is a great way to start conversations with many people.



 Are there some items that arrive in large quantities and could be directed to charitable organizations?

SUGGESTIONS

Give customers ideas about what they can do with various items.

- Make hand-outs of do-it-yourself (DIY) projects involving common items in the reuse program.
 - Windows can be used to make cold frames or small greenhouses
 - Hollow-core doors work great for making theater props or desktops
 - Sinks and countertops become potting benches
- Consider a series of before and after pictures of a repaired or repurposed item
 - Pallets can be furniture, portable bars and more
 - Bedframes can be used to rack firewood
 - Leftover toy sandboxes can become gardens

General reuse program information works best in hand-outs, on webpages, and print advertising. Real-time information may be best relayed through social media, web advertisements, blog posts, e-news, and more.

- Got lots of ski equipment? Post a picture in social media with a chair or fence made from skis and watch the "likes" roll in.
- Unique items that are of good quality but may be hard to place could benefit from a post on Facebook or other social media.

TOOLS

Samples of WLSSD-designed pieces are contained in the Appendices.

- Posters designed for college hallways, casual placement for offices, etc.
- DIY Flyers
- Print ads
- Print posters
- Rack card



The teal chairs were taken from the WLSSD's MRC Reuse Area. Two were repainted and recovered. This one became a flower planter.

SUMMARY AND LIST OF RECOMMENDATIONS



















SUMMARY

Reuse is a real method of landfill abatement and has been around in some form for centuries. Reuse programs for somewhat marginal items are feasible and can work well adjacent to waste recycling, recovery and disposal sites.

It is important to understand the types of waste entering a site in order to know how much could be reused and then build the program from that. There will always be some items in the reuse program that need to return to the trash. Employee cross-training will help employees in all aspects of the organization to discern items that will successfully find new homes, thereby minimizing disposal charges and maximizing landfill abatement.

RECOMMENDATIONS

- Begin with a vision. Lay out the pros and cons of each option considered.
- If you are expanding an existing reuse program, understand the reasons
 for expanding the program and realize that any change in longestablished habits and rules will take some time to accomplish.
- Decide what information you want from your customers and train them and your employees from the start. Establish good rules and standard operating procedures from the start. Develop a plan of action to deal with issues.
- Organize the reuse site or building(s) with good signage.
- Publicize the program.
- Be aware that there will still be some waste. Strive for zero waste, but budget for a percentage of potential reusable items that may still need disposal.
- Periodically review the waste coming in to understand how much could be segregated for reuse.
- Revisit the original goals as the reuse program changes and grows; be willing to adapt.

Growing to fit a critical need in the community. WLSSD constructs large garage-style buildings to organize and store materials for reuse.



APPENDICES – INFORMATIONAL RESOURCES



















ADDITIONAL INFORMATION

Immediately following is additional history about the WLSSD reuse program. Also, this section contains a series of forms, promotional and educational pieces that have been developed to improve the MRC Reuse Area operations and help people rethink what it means to reuse items.

- History of the MRC Reuse Area
- Customer Forms
- Weight list
- Posters, Flyers, Ads, Hand-outs

GROWING PAINS

The MRC Reuse Area began with a handmade sign and a shipping container. It was soon inadequate for the amount of reusable material being brought in for disposal and later identified as reuseable by staff as they helped customers manage their unwanted items.





A HISTORY OF WLSSD'S MRC REUSE AREA

WLSSD's Materials Recovery Center (MRC) was built to fill a community disposal need when WLSSD's Rice Lake Regional Landfill was closed at the end of 2001. The concepts of landfill diversion through recycling and reuse were key drivers in the design. The MRC manages several types of items:

- Mixed Bulky Waste (furniture, carpeting, construction & demolition debris, household 'junk', etc.)
- Reusable materials & items
- Major Appliances
- Electronics
- Tires
- Mattresses
- Household Recyclables
- Scrap Metal
- Small Appliances
- Brush

The bulky waste pricing structure is set to reflect cost of disposal or a lower rate for items that can be reused or recycled. WLSSD charges a fee for items selected for reuse to ensure funds are in place to cover disposal of "reusable" items that don't find a home. MRC staff determine which items are suitable for reuse and then charges the customer the lower rate.



A typical bulky waste box in 2002. A variety of items could be reused, but there was not yet adequate capacity to set all of this aside.

WLSSD started a reuse area at its MRC in late 2001 with a single shipping container and a couple of handmade signs. At first, the area housed mostly lawnmowers, snow blowers, bicycles, and other items that were primarily scrap metal if not reclaimed. The Area was "open for shopping" only a day or two each week, and adult visitors were allowed to take up to 2 items per visit. The program grew over the years to include a much wider variety of offerings.

With the expansion came growing pains that drove necessary changes:

- As volume as type of materials grew, WLSSD found a need for additional storage & display space
- Staff levels increased in order to designate staff to oversee reuse
- Program popularity and customer demand led to an increase in the number of days reuse program was open (all operating hours of the MRC)
- Traffic flow for the entire facility was changed to accommodate the large number of visitors to the Reuse Area.
- WLSSD increased the number of items each customer could take per visit.
- WLSSD designed an expedited system to quickly move reuse visitors through the gatehouse and reduce long lines during high-traffic times.

A formal space was designated for reuse and the Reuse Area was a permanent fixture at the MRC. More shipping containers were purchased and placed. Staff built racks along the inside of several shipping containers to better display various items. The program continued to grow and buildings were constructed in 2015. The shipping containers had proven too narrow for easy access to larger items like couches and recliners.

Driving surface and walking areas were improved with gravel, parking areas were created and parking signs were posted. To reduce dirt and other debris in the buildings, WLSSD paved the drop-off and loading lane in front of the large garage buildings.

Today, there are three large garage-style buildings and four shipping containers to house materials for customers "shopping". Outdoor items are arranged between and in front of each labeled building or container. The MRC Reuse Area is open five days a week year-round and continues to grow.

REPURPOSING A SHIPPING CONTAINER

Shipping containers have been used in the WLSSD Reuse Area since it's launched more than a decade ago. They are a cost-effective means of storing reusable items

Shelves are constructed lengthwise on one side of the container for display purposes. In 2017, several were rotated to be broadside to traffic flow. The side walls were cut and roll-top doors placed. This has greatly improved lighting and also simplified stock change-over. Removing an item from the container is also much simpler now.



TODAY'S MRC REUSE AREA

With more than 25,000 annual visits to the Reuse Area alone, the entire materials recovery complex is an extremely busy place. Following are several more improvements that have been made.



Frames of PVC pipe hold items like golf clubs, skis and ski poles.

The third garage building was constructed with a transparent panel across the back wall for natural lighting.





Surplus pallets rack together to store outdoor items.

CUSTOMER FORMS

Since 2002, the WLSSD MRC Reuse Area has used a liability release form. It has been modified over time and is now a full page version (below). Any customer wanting to shop in the MRC Reuse Area must sign a forms before proceeding into the facility beyond the main gatehouse. Customers regularly shopping more than twice a week are issued a card (see sample at the bottom of this page) and must show it at each visit. A signed waiver is on file to match each numbered card. The brightlycolored card is good for one year; the color changes each year.



MRC REUSE AREA LIABILITY RELEASE AND RECORD OF ITEM RECEIPT

The Western Lake Superior Sanitary District (WLSSD) accepts materials at its Materials Recovery Center (MRC) and offers to the public at no charge materials that may be usable. WLSSD has not inspected or tested the materials. WLSSD does not guarantee that the materials are safe, in operating condition, or usable for their original purpose. Should you accept materials from the MRC, you do so at your own risk. WLSSD is not responsible for problems encountered from the use of such materials.

Release and Waiver of Liability
I wish to participate in the WLSSD reuse program by inspecting available material and/or taking possession of an item or items.

If I am participating as a representative agent of a nonprofit organization, I have listed the name of the organization and 9-digit federal Tax ID (EIN) below, and with my signature, I am affirming that the organization I represent is registered as a nonprofit with

I understand that during my inspection of available materials I may encounter sharp edges, sharp objects, uneven surfaces, slippery surfaces or other unsafe conditions that may cause personal injury. I hereby expressly assume the risk of any personal injury occurring at the MRC during my inspection, removal, or loading of available materials.

I understand and agree that I am taking any such material in an "as is" condition and that WLSSD does not guarantee the performance of any item available at the MRC. I further understand and agree that WLSSD does not make any representations or warranties, express or implied, regarding the fitness of any material I acquire at the MRC. I also understand, agree and acknowledge that my use of any such item is at my sole risk.

Through my signature below, I hereby expressly release and indemnify WLSSD, its board members, agents, and employees from any claims, demands, injuries, damages, actions or causes of action arising out of or connected with either my visit to the MRC and/or the use or performance of any material I remove from the MRC. I represent that I am at least 18 years of age. This release and waiver shall be binding on my successors and assigns.

Print Name		Date	
Signature		Zipcode	
Organization Name	FIN #		

INSTRUCTIONS FOR USING THE MRC REUSE AREA

The MRC Reuse Area is open during regular MRC hours of operations and closes each day 15 minutes prior to the close of the

All customers who use the Reuse Area must sign the liability release and complete the record of items taken. A new signed liability release and a record of items are required for each visit.

Customers must be 18 years or older. Each customer can visit the Reuse Area 1 time per day.

Each customer can take 2 reusable items per visit (multiple items in a matched set may count as 1 item).

Customers on site representing a non-profit agency registered with WLSSD, and having confirmed such with the MRC attendant, are not limited by the 2 item criteria.

No smoking allowed. Children must be supervised by adults. Pets must stay in vehicles.

Customers are allowed to take reusable materials at the MRC that are set aside in the Reuse Area. The removal of materials from any other area is not allowed without express authorization from the MRC Attendant.

A customer's business at the MRC will be completed in a timely manner (15 minutes). There will be no loitering at the MRC while waiting for reusable items.

Customers are not to approach vehicles or persons dropping off reusable materials.

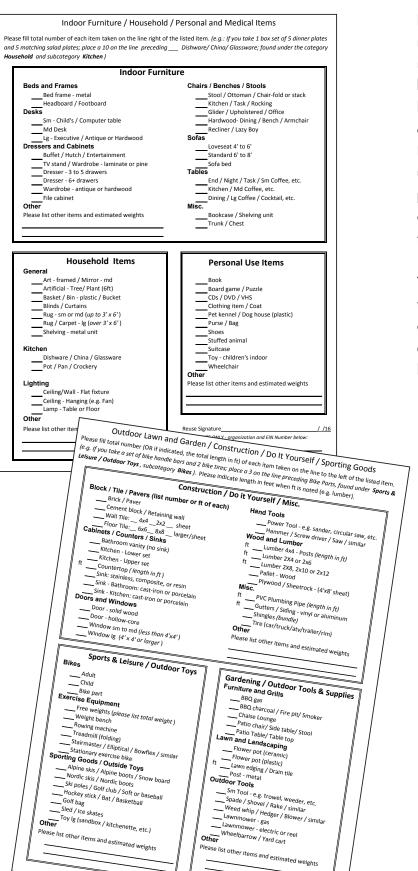
MRC reuse services are intended to be available to all District residents. The MRC Attendant has the authority to deny access to the Reuse Area if they determine that the frequency of a customer's visits exceeds the intent and purpose of the fac compliance with these rules may result in the revocation of Reuse Area privileges.



g this card, I am confirming that I have a signed waiver on file SSD. Through my signature on the waiver, I expressly release nnify WLSSD, its board members, agents, and employees from ns, demands, injuries, damages, actions or causes of action it of or connected with either my visit to the MRC and/or the formance of any material I remove from the MRC. I represent t least 18 years of age. The waiver on file shall be binding on sors and assignees.

designated parking ms per adult customer inute visit ren must be supervised ot approach vehicles

MRC Reuse Area shopping privileges can be revoked



In 2016, WLSSD's liability release form was revised to separate out data collection. The reuse data form was developed to capture better information about the reuse items leaving the MRC Reuse Area. It was printed on 8 1/2 x 11 paper and double-sided. Information was collected for 11 months and used to develop monthly average weights per customer. Now the number of customers corresponds to a monthly weight based upon this conversion.

The reuse pass below is a time-stamped form that staff starting using in 2017 to help move customers through the Reuse Area more efficiently while still maintaining the 2 item limit.

MRC Reuse Area Pass

List the 2 items you have taken:

1.

2

Turn form in to MRC employee

For office use _____ time initials

- Use designated parking
- 2 items per adult customer
- 15 minute visit
- Children must be supervised
- Do not approach vehicles

Shopping privileges can be revoked.

REUSABLE ITEM WEIGHTS

Following is a list of item weights that are used in the process of collecting reuse data at WLSSD's MRC Reuse Area. These weights were compiled from a combination of web sources, actual weighing exercises and information provided by the Minnesota Pollution Control Agency. In each category, there is an "other" option. This corresponds to empty blanks on the reuse data forms. Customers write in the item if it is not on the list and provide their best weight estimate.

Category ID	Item Name	Item weight, pounds
Indoor Furniture	Bed frame - metal	25
Indoor Furniture	Headboard/Footboard	35
Indoor Furniture	Sm - child's/ Computer table	85
Indoor Furniture	Med Desk	185
Indoor Furniture	Lrg - Executive / Antique or Hardwood	275
Indoor Furniture	Buffet/ Hutch/ Entertainment	195
Indoor Furniture	TV stand / Wardrobe -modern construction	100
Indoor Furniture	File cabinet	75
Indoor Furniture	Dresser - 3 to 5 drawers	107
Indoor Furniture	Dresser - 6+ drawers	160
Indoor Furniture	Wardrobe - Antique or Hardwood	250
Indoor Furniture	Stool/ Ottoman /Chair-fold or stack	13
Indoor Furniture	Kitchen/ Task/ Rocking	28
Indoor Furniture	Glider/ Upholstered / Office	42
Indoor Furniture	Hardwood- Dining/ Bench/ Armchair	65
Indoor Furniture	Recliner / Lazy boy	112
Indoor Furniture	Loveseat 4' to 6'	70
Indoor Furniture	Standard 6' to 8'	200
Indoor Furniture	Sofa bed	275
Indoor Furniture	End/ Night/ Task/ Sm coffee, etc.	42
Indoor Furniture	Kitchen / Med coffee, etc.	63
Indoor Furniture	Dining / Lrg coffee / Cocktail, etc.	85
Indoor Furniture	Bookcase / Shelving unit	88
Indoor Furniture	Trunk/ Chest	75
Indoor Furniture	Furniture Other	
Household	Art -framed/ Mirror - med.	10
Household	Artificial - Tree/ Plant (6ft)	49
Household	Basket / Floral arrangement	
Household	Bin	
Household	Blinds / Curtains	4
Household	Rug - sm, md (up to 3x 6 ft.)	11
Household	Rug / Carpet - Ig (over 3x 6 ft.)	
Household	Shelving - metal unit	35
Household	Dishware/ China/ Glassware	0.75
Household	Pot / Pan/ Crockery	,
Household	Ceiling / Wall - Flat fixtures	3
Household	Ceiling - Hanging (e.g.: Fan)	1!
Household	Lamp - Table or Floor	-
Household	Household Other	

Category ID	Item Name	Item weight, pounds
Personal Use Items	Books	0.6
Personal Use Items	Board game / Puzzle	1
Personal Use Items	CD/DVD/VHS	0.7
Personal Use Items	Clothing item / Coat	1.5
Personal Use Items	Pet kennel / Dog house (plastic)	30
Personal Use Items	Purse / Bag	1
Personal Use Items	Shoes	1.5
Personal Use Items	Stuffed animal	1
Personal Use Items	Suitcase	7
Personal Use Items	Toy -Children's	1
Personal Use Items	Wheelchair	35
Personal Use Items	Personal Other	
Construction / Do it Yourself / Misc.	Brick / Paver	5
Construction / Do it Yourself / Misc.	Cement block / Retaining wall	28
Construction / Do it Yourself / Misc.	Wall Tile: 4x42x2 sheet	0.5
Construction / Do it Yourself / Misc.	Floor Tile: 6x6 8x8 larger/sheet	4.5
Construction / Do it Yourself / Misc.	Bathroom vanity (no sink)	20
Construction / Do it Yourself / Misc.	Kitchen - Lower set	200
Construction / Do it Yourself / Misc.	Kitchen - Upper set	135
Construction / Do it Yourself / Misc.	Countertop (length in ft.)	10.5
Construction / Do it Yourself / Misc.	Sink: stainless, composite, or resin	15
Construction / Do it Yourself / Misc.	Sink -Bathroom: cast-iron or porcelain	40
Construction / Do it Yourself / Misc.	Sink -Kitchen: cast-iron or porcelain	100
Construction / Do it Yourself / Misc.	Door (solid wood)	80
Construction / Do it Yourself / Misc.	Door (hollow-core)	25
Construction / Do it Yourself / Misc.	Window sm to md (less than 4'x4')	30
Construction / Do it Yourself / Misc.	Window lg (4' x 4' or larger)	120
Construction / Do it Yourself / Misc.	Power Tools - sander, circular saw, etc.	15
Construction / Do it Yourself / Misc.	Hammer/ Screw driver/ Saw/ similar	2
Construction / Do it Yourself / Misc.	Lumber 4x4 - Posts	5
Construction / Do it Yourself / Misc.	Lumber 2X4 or 2x6	1
Construction / Do it Yourself / Misc.	Lumber 2X8, 2x10 or 2x12	4
Construction / Do it Yourself / Misc.	Pallet - Wood	28
Construction / Do it Yourself / Misc.	Plywood/ Sheetrock - (4x8 ft sheet)	40
Construction / Do it Yourself / Misc.	PVC Plumbing Pipe	3
Construction / Do it Yourself / Misc.	Gutters / Siding - vinyl or aluminum	4
Construction / Do it Yourself / Misc.	Shingles: (bundle)	88
Construction / Do it Yourself / Misc.	Tire	20
Construction / Do it Yourself / Misc.	Construction Other	

Category ID	Item Name	Item weight, pounds
Gardening/ Outdoor Tools & Supplies	BBQ gas	67
Gardening/ Outdoor Tools & Supplies	BBQ charcoal / Fire pit/ Smoker	31
Gardening/ Outdoor Tools & Supplies	Chaise Lounge	28
Gardening/ Outdoor Tools & Supplies	Patio chair/ Side table/ Stool	15
Gardening/ Outdoor Tools & Supplies	Patio Table/ Table top	75
Gardening/ Outdoor Tools & Supplies	Bucket, 2-5gal	4
Gardening/ Outdoor Tools & Supplies	Flower pot (ceramic)	3
Gardening/ Outdoor Tools & Supplies	Flower pot (plastic)	0.2
Gardening/ Outdoor Tools & Supplies	Lawn edging / Drain tile	0.3
Gardening/ Outdoor Tools & Supplies	Post - metal	5
Gardening/ Outdoor Tools & Supplies	Sm Tool - e.g. trowel, weeder, etc.	2
Gardening/ Outdoor Tools & Supplies	Spade/ Shovel/ Rake/ similar	5
Gardening/ Outdoor Tools & Supplies	Weed whip/ Hedger/ Blower/ similar	24
Gardening/ Outdoor Tools & Supplies	Lawnmower - gas	45
Gardening/ Outdoor Tools & Supplies	Lawnmower - electric or reel	29
Gardening/ Outdoor Tools & Supplies	Wheelbarrow/ Yard cart	33
Gardening/ Outdoor Tools & Supplies	Gardening Other	
Sports & Leisure /Outdoor Toys	Bike - Adult	30
Sports & Leisure /Outdoor Toys	Bike - Child	23
Sports & Leisure /Outdoor Toys	Bike part	0.5
Sports & Leisure /Outdoor Toys	Free weights (please list total weight)	
Sports & Leisure /Outdoor Toys	Weight bench	38
Sports & Leisure /Outdoor Toys	Rowing machine	50
Sports & Leisure /Outdoor Toys	Treadmill (folding)	250
Sports & Leisure /Outdoor Toys	Stairmaster/ Elliptical/ Bowflex/ similar	175
Sports & Leisure /Outdoor Toys	Stationary exercise bike	100
Sports & Leisure /Outdoor Toys	Alpine skis /Boots /Snow board	8
Sports & Leisure /Outdoor Toys	Cross country skis / Boots	3
Sports & Leisure /Outdoor Toys	Ski poles / Golf clubs / Soft or baseball	0.7
Sports & Leisure /Outdoor Toys	Hockey stick/ Basketball/ Bat	1.3
Sports & Leisure /Outdoor Toys	Hoop or back board (basketball)	
Sports & Leisure /Outdoor Toys	Golf bag	8
Sports & Leisure /Outdoor Toys	Sled / Ice skates	3.5
Sports & Leisure /Outdoor Toys	Toy Ig (sandbox/ kitchenette / etc.)	13
Sports & Leisure /Outdoor Toys	Sports Other	

POSTERS

Following are samples of posters that were created for placement in college hallways. The images are of items actually at the MRC Reuse Area. These are used rather than stock images in order to convey what types of items really are available for reuse in this program. These are designed to print as 11x17 pieces at each college.



We have it - FREE!

Furniture, housewares, TONS of DIY materials & other cool stuff for FREE!!

The Reuse Area

WLSSD Materials Recovery Center
4587 Ridgeview Road · Duluth
(corner of Rice Lake and Ridgeview Roads)

We provide the free stuff – you load, secure and transport the treasures you select. Choose up to 2 items per day!

chairs e exercise equipment e desks e kitchen supplies e sofas e patio furniture home decor e old windows e lamps e sporting goods e dining room sets e books storage bins e toys e side tables bikes e dishware e pallets e knick knacks e skis gardening supplies e lumber e glassware e side tables e art work e block pavers holiday decor e cushions e pet supplies e doors e file cabinets e kitchen sinks

Summer: Mon – Sat, 9-3:45 Winter: Tues – Sat, 9-3:45

MRC ULSSO MATERIALS RECOVERY CENTER

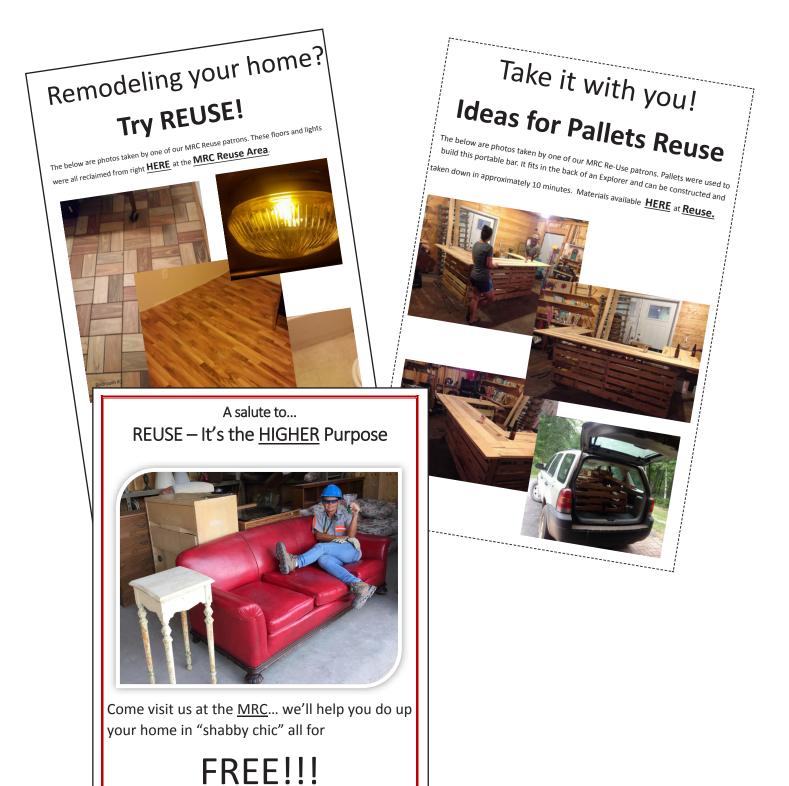




ENJOY WINTER MORE with FREE STUFF Get Outdoors! Furniture, The Reuse Center reclaims skis, sleds, skates, and snow boards. We get tarps, duck blinds, and lots of chairs for winter hunting and ice fishing support. Build yourself a sled to haul winter camping gear. housewares, TONS of DIY materials & other cool stuff for FREE!! Relieve Your Cabin Fever! Too cold to go outside? Time for DIY projects! Construct creative room furnishings, refinish a table or chair, OR build your own—another use for those skis! Shape Up for Spring! Nautilus®, free weights, Nordic Track®, treadmills, and basketball hoops—we get them all. No telling The Reuse Area what you might find! **WLSSD Materials Recovery Center** 4587 Ridgeview Road · Duluth (corner of Rice Lake and Ridgeview Roads) Hours of operation: Tues – Sat, 9-3:45

POSTERS TO PLACE ON SITE AT THE REUSE AREA

Following are samples of posters created for placement at the MRC Reuse Area. The images are of projects made with items from the reuse program. In addition to these posters, printed photos are also placed on bulletin boards within the buildings as customers share them.





Make a Greenhouse or Hot Box from Old Windows and Doors

Whether you are going for a traditional look, new age, unique, or something eclectic that simply serves the purpose, you just might find the materials you need for FREE in the MRC Reuse Area (at the WLSSD Materials







Constructing a basic greenhouse involves laying the foundation, laying the floor, framing the walls, and finishing with materials that let in sunlight and keep in heat. Whether it's made from windows or doors, fiberglass or plastic, a hot box can be even simpler! Construct a frame and add a window or glass-paned door

With some creative thinking, basic carpentry skills and a willingness to "make do" with what you might find, a trip to the WLSSD MRC Reuse Area might just start you on your way to RE-constructing that backyard dream house. A list of materials you'll need will include:



- Old windows
- Old doors
- Sand and bricks for floor
- Concrete for footings
- Framing lumber
- Nails and screws Basic carpentry tools



ours: Mon – Sat. 9 a.m. to 4 p.m. Winter Hours: Tues - Sat. 9 a.m. to 4 p.m. * Reuse Area closes daily at 3:45 p.m.

Make a Potting Bench from Old Pallets and Doors

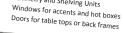
You can finally get that potting bench, vegetable cleaning station, or outdoor sink you have always wanted—for FREE. With some creative thinking, minimal carpentry skills, and a willingness to "make do" with what you might find, you could be well on your way to a snazzy backyard

improvement!

Above – wood pallet construction

The Western Lake Superior Sanitary District's Materials Recovery Center has a wide variety of FREE items in the Reuse Area that could stimulate your creative thinking. Some items you might find there

- Wood Pallets
- Kitchen or Bathroom Sinks
- Cabinetry and Shelving Units





Above – old sink construction Below – dresser & window options



















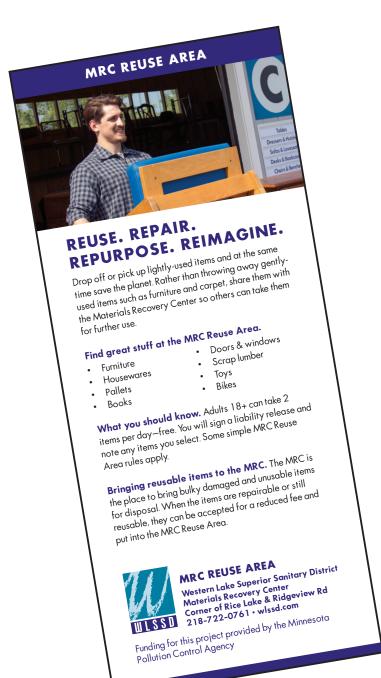


POSTERS, ADS, BROCHURES

Following are samples of several pieces created to market not only the MRC Reuse Area but also the Product Reuse Center at WLSSD's Household Hazardous Waste Facility. Items from the MRC Reuse Area benefit with some TLC in the form of paints, stains, adhesives, and more from the Product Reuse Center.









REUSE. REPAIR. REPURPOSE. REIMAGINE.

WLSSD has two facilities offering **free** reuse programs. Find **free**, lightly-used items — from bookshelves to bikes at WLSSD's MRC Reuse Area in the Materials Recovery Center. Then, give them new life with **free** paints, cleaners, and more from WLSSD's Product Reuse Center in the Household Hazardous Waste Facility. Save money and resources while reducing waste!

MRC Reuse Area Product Reuse Center
Materials Recovery Center Household Hazardous Waste Facility
Corner of Rice Lake & Ridgeview Rd 27th Ave W & the Waterfront

WLSSD

Western Lake Superior Sanitary District • 218-722-0761 • wlssd.com

A chair made from reclaimed lumber and skis was commissioned by WLSSD for display at the Home and Builders Show in 2017. Names were collected at all events which WLSSD staff attended that spring and entered into a large drawing. This not only continued to generate interest in the MRC Reuse Area but also created some positive feedback for the builders who provide classes for constructing these types of chairs.

