

Water

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Water, Fresh and Otherwise

A summary of camp water and plumbing. (Updated May 2025)

Fresh Water Sources

Tank	Capacity (gal)	Refills Available?	Used in 2024	2025 Plans
Gayflower Tanks	2310	No	1000 for kitchen 454 for showers	Fixxer to fill in Gerlach before burn
Build Team RV	176	Yes	251 for build RV	2 refills preordered from SSS
SSS Tank	500	Yes	600 for canteens	Preordered 1 refill - use for kitchen
			2305 total 6.2 gal per camper day	

Gayflower Tanks - Details

As of 2025 the Gayflower has 7 brand new IBC totes that hold 330 gallons each so we will have a capacity of 2,310 gallons.

The totes are filled in [Gerlach](#) for about \$0.50 per gallon by Empire Storage and Rental (Andy "Fixxer" Owens) who store the Gayflower.

- Do not use other water sources in the area such as Empire or other wells. They usually have sulphuric water due to the hot springs which doesn't taste great.*

The gayflower tanks are directly plumbed to provide showers, toilets, and sinks in the Gayflower, however, there is also an option to hook up hoses. In 2024 we used the bright green hose to fill the tank in the Food Fort.

Build Team RV Fresh Water - Details

The build team RV has a large fresh tank which holds 176 gallons of water.

We usually fill that in Reno at the GSR RV Resort (where we stay for one night before driving in.)

We can also get it refilled on playa by pre-ordering from Sierra Site Services.

SSS Tank - Details

We can rent a 500 gallon tank from Sierra Site Services which comes with a pump and 15' hose. They bring it and fill it up, and they can come back to refill it.

In **2024** this tank was only used for canteen filling.

In **2025** the plan is to use it for the kitchen and possibly canteen filling.

There are other vendors besides Sierra Site Services, but we had terrible experiences with Meco in 2023 and SSS has been absolutely amazing.

Waste Water

"Grey Water" refers to water from sinks and showers which has come in contact with humans and is unsafe to reuse or evaporate. "Black Water" refers to water from toilets which is even worse.

Tank	Capacity (gal)	Pumpouts Available?	Used in 2024 (est)	2025 Plans
Gayflower Black Tanks	1250	No	600	
Gayflower Grey Tanks	1250	No	1100	
Build Team RV Black	100	Yes (flag a truck)	150	
Build Team RV Grey	100	Can be sump pumped to Gayflower	200	
SSS Tank	250	Yes	1000 mostly from kitchen and neighbors	We have preordered 100 gallons in pumpouts
			2850 total	

Gayflower Grey and Black Tanks - Details

Under the floor of the Gayflower are 10 (ten) 250 gallon tanks. The ones on the driver side are all plumbed together and hold black water from the toilets. The ones on the passenger side are all plumbed together and hold grey water from showers and sinks.

During the week we could use a sump pump or water bug to pump excess grey water from somewhere else (kitchen, RV) into the Gayflower since it has so much capacity. In 2024 we pumped this into the grey water side, but in 2025 we should pump it into the black water side since that side has so much more capacity.

As of 2025 there are water level sensors connected to these tanks so you can read their *approximate* level. We didn't have any way to test them in advance so we'll see how well they work!

RV Tanks

The Build Team RV has two tanks, probably about 100 gallons each, for grey and black water.

You can theoretically flag down a USS truck at Burning Man which will pump them out for some cash (in 2024 we didn't see many of those trucks)

You can also sump pump excess *grey* water to the Gayflower.

After the burn you can dump them at the [GSR](#) in Reno (if we're staying there), the [TA Travel Center](#) in Sparks, or at the Loves in Fernley.

SSS Grey Water Tank - Details

We can rent a 250 gallon grey water tank from SSS which is a low cube. They will come and pump this out during the week (if paid in advance).

In 2024 was used primarily for the kitchen, but some neighboring camps who had not made arrangements for grey water also dumped their grey water in there. We filled it 4 times.

In 2025 it will again be used exclusively for the kitchen.

Vendors

Sierra Site Services
Office: 888-458-8777
Mobile: 530-957-5049

Contact there is Michelle Haley <michelle@sierrasiteservices.com> and they have an office on playa.

Moving Water in Camp

Every year we've been getting better and better at figuring out how to easily move water, clean and dirty, around in the camp.

Fresh Water Well Pumps

We have two [Harbor Freight 1HP Well Pumps](#). ([Manual](#)) - the main one keeps the fresh water system in the Gayflower pressurized, and there is also a backup if something happens to that one. When we rent a fresh water tank from Sierra Site Services they also provide this exact same pump.

These pumps seem to work really well, and they have their own bladder so that the pump doesn't have to flip on and off frequently. Basically, they will maintain pressure in a pressurized water system, like the water supply in the Gayflower or the Kitchen Fort, or even when attached to a hose.



Pro Tip: When delivered, our pump was not primed. To prime it, you have to open a little nut and pour in some water until it overflows. We did this using a plastic bag with the corner cut off.

Pro Tip: Do not run this kind of pump dry for more than 10 seconds.

Pro Tip: The tank must be pressurized to 23 psi which can be done with a bicycle pump.

NEVER use this tank for anything other than potable water.

Sewer Pumps

[Harbor Freight 3/4 HP Submersible Sump Pumps \(Manual\)](#)



These were intended to move grey water around camp quickly, say, from

the kitchen to the davflower. They pump water into a thick red 2" hose that looks like this:



We have about 50' of this hose.

There are two problems with this method of pumping grey water. The first is that the sump pump is meant to sit in a bucket that fills up with grey water causing the ball to float which turns on the pump. That means it never pumps the bottom n inches of water which can be a lot depending on the size of the bucket you put it in. The second is that those 2" hoses fill up with grey water and once the bucket is empty, they stay filled up with grey water... there is no way to cause the pump to push out the remaining contents all the way to wherever you're going. This means there is a manual step, after pumping grey water, involving walking the red hose from the source to the destination to gravity-force out all the water.

Designed by Sierra is low-slung and looks like this:



With this tank, it's not a big problem to hand-carress the grey water from

the hose into the tank. However, if you are trying to move grey water up to the Gayflower, where the tanks are probably 5' off the ground, it's not so easy.

For the last mile, we have these little Water Bug Style Pumps:



That can be completely submersed in water and it will suck up virtually everything and pump it up through a narrow hose, which gets the last little bits of water up and out. It's slow, though, compared to the big sewer pumps.

IN SHORT we still don't have a great way to move grey water from the Kitchen Fort to either the Gayflower or a Sierra Grey Water Tank. It's just a bit of a manual messy process. This is something we will continue to work on for 2025.

The Kitchen Fort Water System

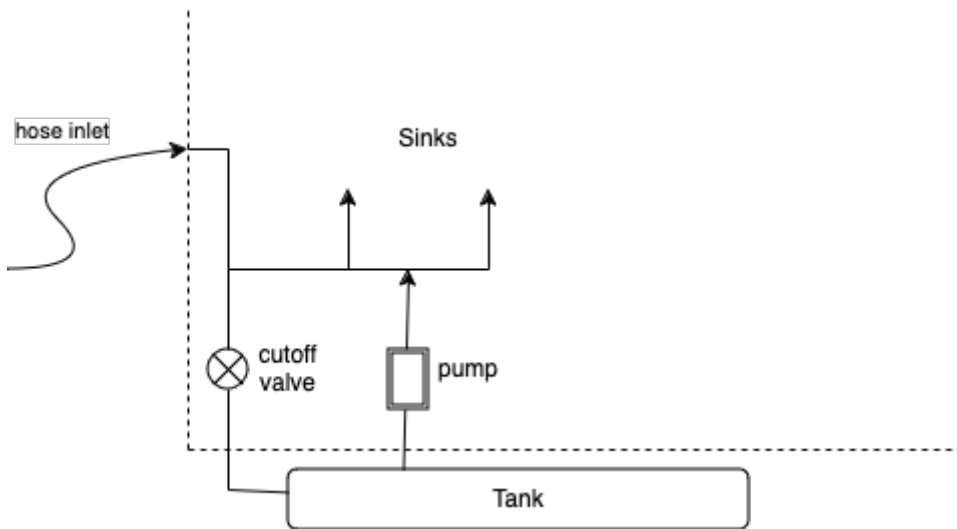
The kitchen fort, delivered in 2023, is a marvel in camp automation, allowing us to bring a commercial-quality working kitchen to playa and start using it without any setup. However, we're still learning about the best way to hook it up to water.

Fresh Water

There are two separately plumbed fresh water systems: one for sinks and one for the ice maker. The inlet for each of these systems is on the passenger side, front. They are 3/4" hose inlets:



Each system is laid out like this:



Each one has:

- a hose attachment outside for connecting water to the system
- two tanks, per system, under the bottom of the trailer to store water.

These tanks have an opening at the top, allowing air in and out so they can fill and empty. This opening also means that if you overfill them with a hose, the excess water just starts to pour out onto the ground without warning.

- a little Shur-Flo pump inside the trailer that can pump water up from the tanks to pressurize the system
- a shut off valve inside the trailer that connects or disconnects the tanks and pump. Here's what the shut off valves look like:



Running the system off tanks

In 2023/24 we ran the food fort by filling its tanks. Here's how that works:

1. Open the valve inside
2. Connect the hose, outside
3. Turn on the hose until the tank is full
4. Remove the hose
5. Close the valve inside
6. The pump will pump water up from the tank into the food fort system

You need to do this for both the sinks and the ice maker, separately.

We thought this was a nice idea because it got the water team involved every once in a while and avoided the risk of the kitchen using up all of our camp water by mistake. In reality someone had to fill the tanks once or twice per day, and in particular the ice machine's running out of water probably caused it to dump the water it had instead of just producing a lot of ice.

Running the system without tanks

In 2025 we are going to try to run the system without using its tanks. Here's how that should work:

1. Close the valves inside
2. Unplug the pump(s)
3. Connect the hose, outside
4. Turn on the hose outside
5. The external water pressure should provide water inside the food fort.

The way we'll set this up:

- The SSS 500 gallon tank will be set up right next to the food fort. It has a pump and a 15' hose.
- from the output of that hose, supplied by SSS, we'll connect
- to a hose splitter with shutoff valves
- to two smaller hoses
- each of those hoses goes through a check valve (to prevent backwash)
- and also through a water meter (so we can monitor usage)
- to the two hose inlets (one for ice and one for fresh water) on the side of the food fort.

Ice Maker

The ice maker system is just like the fresh water system, with its own tanks and pump and shut off valve. In 2023 and 2024 we were underwhelmed by the amount of ice this system could produce (it was nothing close to what it should have been able to produce based on specs) and overwhelmed

by the amount of clean but undrinkable water that it dumped on the ground through an open spout under the trailer as a part of it's too-frequent "clean" cycle. In 2025 we want to give it one last chance by keeping it connected to pressurized water so it never runs out of water to see what it can produce.

Grey Water

There are grey water tanks under the kitchen which fill up about once a day. In. 2024, we pumped this water across about 100' to a grey water tank supplied by SSS.

The waste spout of these tanks is a 1.5" ID threaded outlet. It is probably about 9" above the ground.



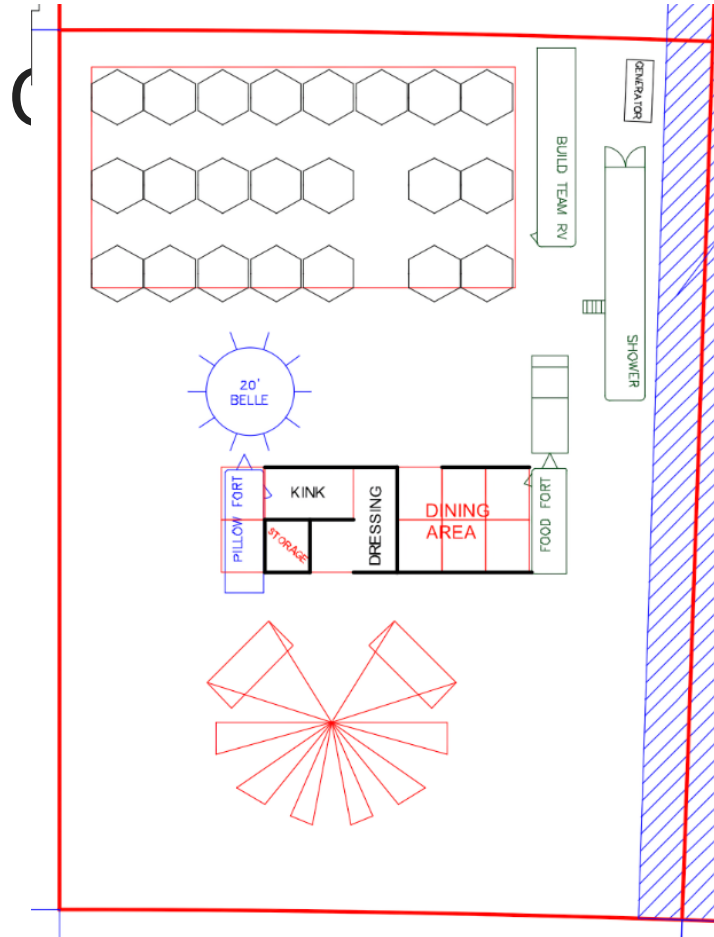
For 2025 the official plan will be to put the SSS tank right next to the kitchen, and it will be exclusively used for kitchen grey water. The SSS tank is about 17½" high with input from the top:



To pump the water from the Food Fort tanks to the SSS tank, we'll connect a Valterra T01-0094VP or Valterra T01-0091VP (ordered) to the 1.5" outlet, and then from there a small length of garden hose, to a transfer pump that can pump the grey water up to the SSS tank on demand. We are going to purchase a [Milwaukee cordless transfer pump](#) which runs on the same batteries as our impact drivers; with that connected it should take about 10 minutes to completely empty the food fort.

2025 Water Plan

This is the 2025 water plan. It is still preliminary.



This year's layout places the Food Fort much

closer to the Gayflower, and with its inlets and outlets facing the fire lane. That means pumping between those two locations is closer and Sierra Site Services ("SSS") can easily service everything if needed.

Food Fort

Read [more details on the Food Fort plumbing](#)

Fresh Water

For the **Food Fort** we expect to use 1000 gallons, same as last year. To make this easy, we'll rent a **500 gallon tank** from SSS and put it right next to the Food Fort inlets on the passenger side, front.

There are two inlets there (both 3/4" garden hose), one for ice machine, and the other for sinks. If possible we'll set it up so the SSS tank directly pressurizes the kitchen.

We will schedule a **single refill** of this tank midweek.

- If the tank is used up before the refill arrives:
 - We'll warn the food team that they are using too much water
 - We'll provide some temporary water using a hose from the Gayflower
- If the tank still has water in it on the day when the refill is scheduled:
 - We'll move it into the Food Fort tanks before refilling, so as to make sure we get all 500 gallons that we paid for

Grey Water

We also expect to generate 1000 gallons of grey water from the Food Fort. We'll rent a **250 gallon tank** from SSS and put it right next to the Food Fort. We'll schedule **three pumps** of this tank (750 gallons) during the week, and we can also leave it full.

During the week, grey water from the food fort will accumulate in its internal tank which holds 104 gallons. On a regular basis, we will use a portable pump to empty that into the SSS tank.

The ice maker dumps a bunch of semi-clean water out the bottom, too. This does not go into any kind of tank. We have to put a large concrete mixing tub under there to catch this water and regularly pump it out to the SSS tank.

The goal is to get the SSS tank as full as possible by the time they come to pump it out, so as to take advantage of all 250 gallons pumping that we paid for.

If we ever get to the point where the SSS tank is full and the internal tank is full, we will have to pump water over to the Gayflower. This is not very easy. I think you could lower a water bug into the SSS tank (hopefully it fits through the big circle on top) and run a hose from there up to the nearest toilet inside the gayflower (hopefully it can pump that far).

Gayflower

The Gayflower will come with over 2000 gallons of fresh water which should be enough for showers, toilets, drinking water (canteens), and as emergency backup for food.

It can accommodate 1250 gallons of grey water and 1250 gallons of black water. Last year the grey water tanks were much fuller than the black water tanks. So if we ever have to pump excess grey

water from the RV or food fort into the Gayflower, we should pump it into the black water tanks.

We will set up a hose from the Gayflower to provide fresh water for drinking, which can go through a water filter.

2026 And Beyond

1. Let's get some inline water meters to better judge how much water we're using
 2. Ultimately I'd like to get the SSS usage down to zero and rely solely on the Gayflower.
- It's way cheaper that way.

Gayflower Repair List and Wish List



Introduction

The Gayflower is an absolute marvel, but it is not particularly robust or fancy. So we always have a ton of improvements we'd like to make to get it better and better! This chart summarizes those plans.

Priority	Project	Status
DONE	Fix Leaks Around Fresh Water Pump The main green fresh water pump has a few little drips. There is a second leak on the thin brass fitting where water goes off to the swamp cooler.	COMPLETED spring 2025
DONE	Replace IBC Totes With New The four IBC totes in the back were used for fruit juice concentrate and cause the water to smell poorly. One of the three IBC totes in the front (the rearmost one) has a broken shutoff valve.	COMPLETED spring 2025

Priority	Project	Status
DONE	Seal Waste Line at Second Urinal We haven't been able to use the second urinal because the waste line leaks.	COMPLETED spring 2025
3 Medium	Leaks around sink bases Faucets are planned to be replaced at Burning Man 2025	unclear; maybe be result of bad faucets. Faucets are planned to be replaced at Burning Man 2025
5 Urgent	Leak in Grey Water Connecting Hoses The one we noticed was probably the rearmost, passenger-side grey water holding tank.	contract out to Adam Pence
4 Important	Better Support For IBC Totes in Back Weld in place a steel structure to support the weight of the water tanks in back, or add more wood	contract out to Adam Pence
4 Important	Secondary Containment for Grey / Black Water Tanks There is an interesting problem that if the grey or black water tanks leak or the hoses connecting them come apart, the contents go onto the playa. There is a black liner there of some sort but it will not contain anything. It is starting to rot away and probably has a lot of holes and screws going through it right now	contract out to Adam Pence
DONE	Level Indicators for Waste Water Tanks Apparently there are already sensors connected to the grey and black water tanks to measure the level, but they are not hooked up to anything that can be used to read their output.	COMPLETED spring 2025
5 Urgent	Main faucets broken cheap old faucets broke. Replace	contract out to Adam Pence or bring replacement parts to Burning Man
5 Urgent	Shower heads clogged and corroded beyond repair	contract out to Adam Pence or bring replacement parts to Burning Man

Priority	Project	Status
5 Urgent	System for easy winterization	(1) Bring a tool so we can blow compressed air up through hose bib. (2) Fixxer said he can add some air connections and more drains. Talk to Adam Pence about this too
2 Low Pri	Repair Hand Wash Sinks Both of these were damaged around the foot pump by freezing.	People barely used this IIRC Might be easy just to swap out the foot pumps, though.
4 Important	Light in back room	Contract out to Adam Pence

Gayflower: Spring 2025 Plan

This documents the replacement of the fresh water system in the Gayflower that was completed May 2025.

"Before" Photo:





0. General conditions

1. Install plywood on rear wall to support the plumbing stack for the pump outlet. **DONE**
2. Get a big tool box and parts box to organize all our plumbing tools and parts **DONE**

1. IBC Tote Replacement

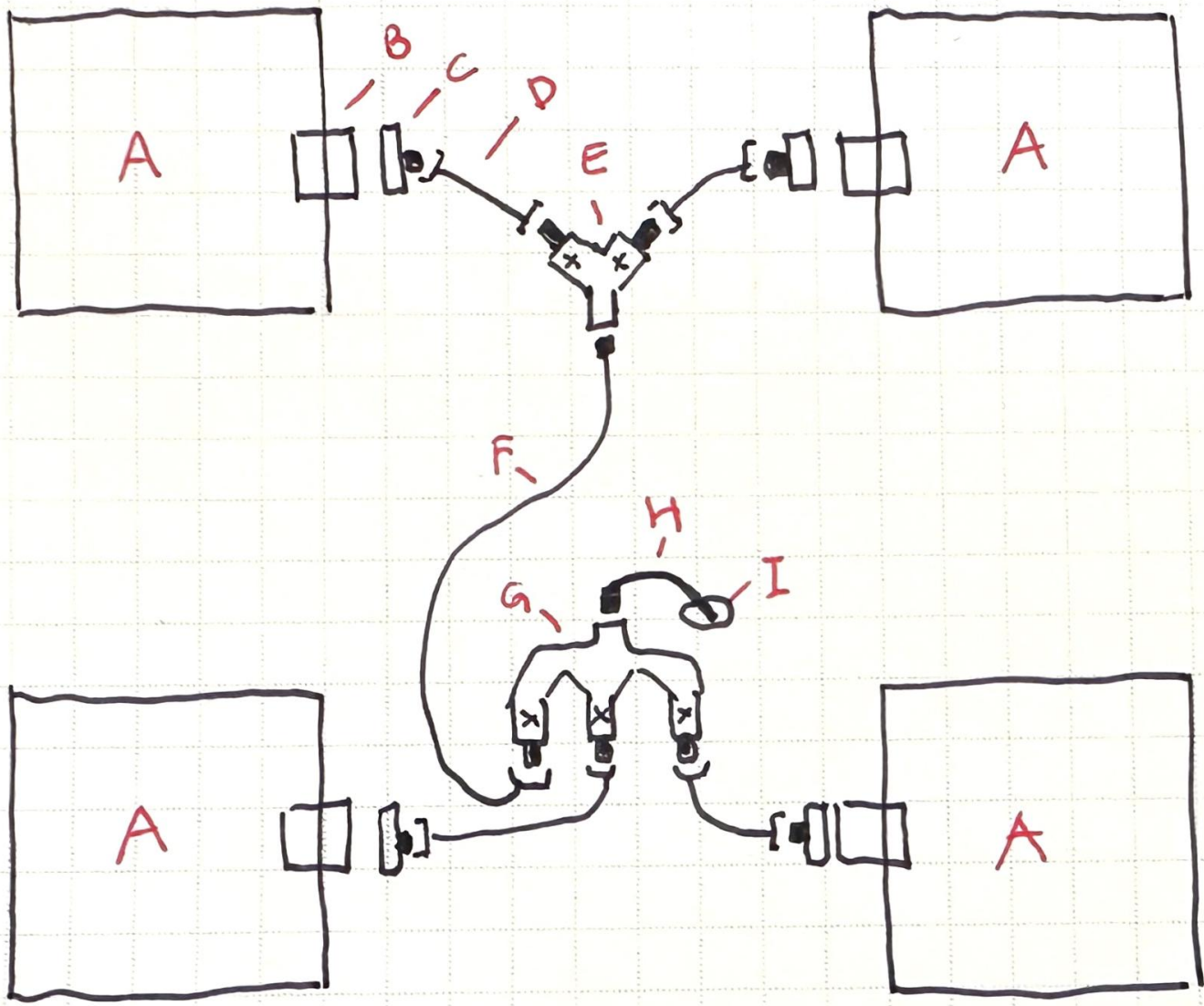
Replace all seven totes with new ones and completely replace all plumbing connecting them.

This design had one bug: the pump would not work without a check valve at the input. We added that in and everything worked great!

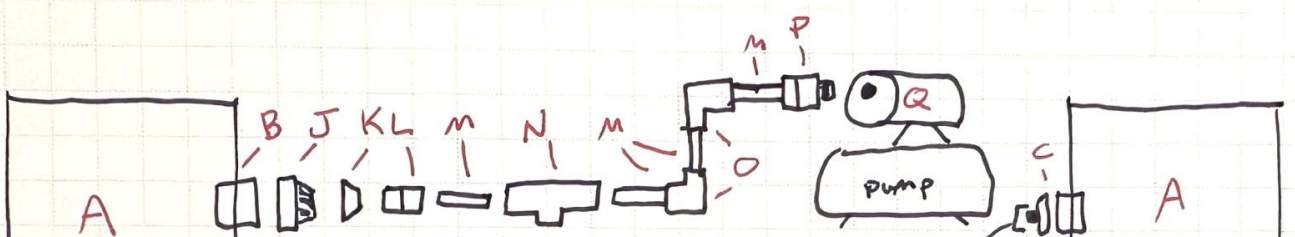
Design considerations

- Use flexible hoses instead of PVC with glue, for easy replacement, more flexibility, and less likely to break
- Pump requires 1" diameter inflow. To accomplish this the nearest IBC tote will be connected with 1" PEX-B. All the other totes can be connect to each other with 3/4" hose just to allow them to balance with each other.
- Shutoff valves everywhere for safety and quick repairs

New plumbing configuration



REAR IBC PLUMBING



A	IBC tote
B	2" Camlock valve, preinstalled on tote
C	2" Camlock to 3/4" Male Garden Hose adapter
D	2' long 3/4" Female to Female Garden Hose Extender (get some 1' as well to minimize slop)
E	3/4" Garden Hose splitter with valves (F - M - M)
F	5' long 3/4" Garden Hose (M - F)
G	3/4" Garden Hose three way splitter with valves (F - M - M - M)
H	50' 3/4" Garden Hose (M - F)
I	Hole in floor
J	2" Female Camlock to 2" Male NPT Adapter, Stainless Steel (example)
K	2" Female NPT to 1" Female NPT
L	1" Male NPT to 1" Sharkbite
M	1" PEX-B
N	1" - 1" - 3/4" Reducing Tee (Sharkbite)
O	1" Sharkbite Elbows
P	1" Sharkbite to 1" Male NPT
Q	Pump, with 1" Female NPT inlet
R	3/4" PEX-B
S	3/4" Sharkbite to 3/4" Male NPT
T	3/4" Female NPT to 3/4" Male Garden Hose
U	3/4" Garden Hose Shutoff Valve (M-F)
V	3/4" Garden Hose Male to Male Coupler

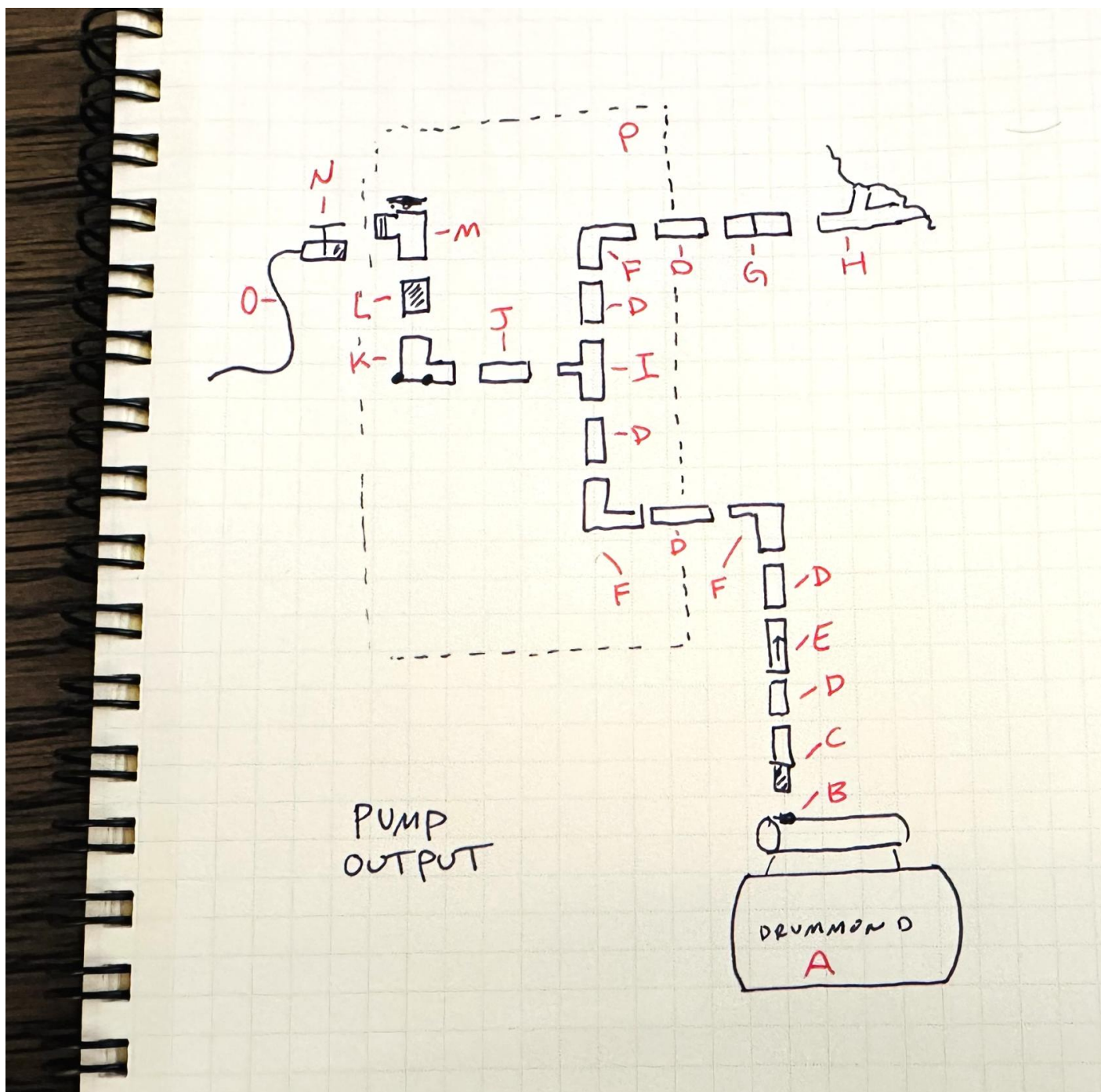
The pump requires 1" diameter input, so it draws from the nearest tote using 1" PEX-B (put together with sharkbite fittings). That tote, and the other six, are all interconnected using 3/4" hoses, which allow the water to seek a level between them.

2. Evaporative Cooler Supply Rerouting

The water supply line for the evaporative cooler should be rerouted so it does not interfere with that IBC tote. Also, it might be responsible for the leak at the top of the pump.

3. Rework plumbing above the pump

The main goal here is to make something that allows for quickly swapping out a failed pump, and eliminate the PVC+glue that is prone to leaks.



A	Existing DRUMMOND 1 HP Stainless Steel Shallow Well Pump and Tank with Pressure Control Switch - 950 GPH
B	1" Female NPT output
C	1" Male NPT to 1" Sharkbite U140LF
D	1" PEX-B Pipe
E	Sharkbite 1" Check Valve (U2020-0000LF) Provide Sharkbite disconnect tongs (U715) for winterizing.

F	1" Sharkbite Elbow
G	1" Sharkbite PVC Fittings Also provide different connections because I don't know what is over there
H	Existing water line, splitting to cold water and hot water
I	1" - 1" - 3/4" Reducing Tee (Sharkbite)
J	3/4" PEX-B Pipe
K	Brass Push Drop-Ear Elbow (3/4" Sharkbite to 3/4" FNPT) (U340LF) Can be screwed onto plywood so that FNPT is facing out
L	3/4" Male NPT to 3/4" Male Garden Hose (amazon)
M	3/4 in. Evaporative Cooler FGH x MGH Sill Cock
N	1/4 in. x 1/8 in. Evaporative Cooler Angle Needle Valve
O	1/4 in. Evaporative Cooler Copper Tube leading to swamp cooler
P	This section to be mounted on plywood Use some 1" and 3/4" pipe hangers like this to make it strong

4. Urinal leak repair

Reference photo:



Not sure what size PVC this is. It is most likely 1 1/2" or 2".

- this might be the world's simplest fix, just glue it back
- but without knowing what it's connected to underneath, it might be a situation where whenever the black water tanks shift around, they move the pipes

To repair this, we would need:

- Short length of PVC pipe ([1 1/2"](#)) ([2"](#))
- PVC couplings ([1 1/2"](#)) ([2"](#))
- Fernco flexible couplings ([this](#) or [this](#))
- PVC male - slip adapter
- Purple primer
- Fine tooth saw or PVC pipe cutter
- PVC cement

Everything here is going to be available from Home Depot.

Consolidated Shopping List

This list has been added to the manifest on the Reno Warehouse (2025) page.

Qty	Item	Vendor	Notes
4	1" Male NPT to 1" Sharkbite	Sharkbite U140LF	
10'	1" PEX-B Pipe - White	Home Depot	
5'	3/4" PEX-B Pipe - White	Home Depot	
2	Sharkbite 1" Check Valve	Sharkbite U2020-0000LF	
1	Sharkbite Disconnect Tongs 1"	Sharkbite U715	
1	Sharkbite Disconnect Tongs 3/4"	Sharkbite U713	
7	Sharkbite 1" Elbow	Sharkbite U260LF	
3	Sharkbite 1" Coupling	Sharkbite U020LF	
1	Sharkbite PVC Transition (1")	Sharkbite UIP4020	
1	Sharkbite PVC Transition (3/4")	Sharkbite UIP4016	
1	Sharkbite 1" to 3/4" Reducing Coupling	Sharkbite U060LF	
3	Sharkbite 1" - 1" - 3/4" Reducing Tee	Sharkbite U416LF	
1	Sharkbite Brass Push Drop Ear Elbow (3/4" Sharkbite to 3/4" FNPT)	Sharkbite U340LF	
1	3/4" Male NPT to 3/4" Male Garden Hose	Amazon	comes as a two pack to provide spare
12	1" Pipe Hangers	Home Depot	12 total needed. Check quantity per pack, don't order 12 packs!
10	3/4" Pipe Hangers	Home Depot	10 total needed. Check quantity per pack, don't order 10 packs!

Qty	Item	Vendor	Notes
1	1/4 in. x 1/8 in. Evaporative Cooler Angle Needle Valve	Home Depot (link)	
50 feet	1/4 in. Evaporative Cooler Copper Tube	Home Depot (link)	
1	3/4 in. Evaporative Cooler FGH x MGH Sill Cock	Home Depot (link)	
1	1/4 in. x 1/8 in. Evaporative Cooler CC and MPT Male Union	Home Depot (link)	spare part
1	1/4 in. Compression Brass Nut Fitting	Home Depot (link)	spare part
1	Mini Copper Tubing Cutter	Home Depot (link)	tool
20	Copper tube straps	Home Depot (link)	need 20 total, not 20 packs
7	Rebottled or new IBC totes 330 gallon 2" Camlock Valve	The Cary Company EST104097	To ship to Empire
7	2" Camlock to 3/4" Male Garden Hose	The Cary Company or Amazon	
2	3/4" Female - Female Garden Hose 5' Length	Amazon	
3	3/4" Female - Female Garden Hose 2' Length	Amazon	
3	3/4" Female - Female Garden Hose 1' Length	Amazon	
2	3/4" Male - Female Garden Hose 6' Length	Amazon	
1	3/4" Garden Hose Y-Splitter With Valves	Amazon	
2	3/4" Garden Hose Three way splitter With Valves	Amazon	
2	3/4" Garden Hose, 50'	Amazon	

Qty	Item	Vendor	Notes
2	2" Camlock to 2" Male NPT Adapter	The Cary Company or Amazon (two included)	
2	2" Female NPT to 1" Female NPT Reducer	Amazon	
10'	1" PEX-B - White	Home Depot	
2'	3/4" PEX-B - White	Home Depot	
2	3/4" Sharkbite to 3/4" Male NPT	Sharkbite U134LF	
2	3/4" Female NPT to 3/4" Male Garden Hose	Amazon	
2	Garden hose shutoff valve 3/4" male to 3/4" female	Amazon	
1 set	Garden Hose Couplers (M-M and F-F)	Amazon	
1	3/4" Plywood 24" x 48" panels	Home Depot in Reno	They sell precut 24x48 pieces (or buy 4'x8' pieces and cut in four) Consider buying an extra 14 to replace crappy shelves in Empire Fort
20	Wood-to-metal self-driving screws #10 diameter 1 1/2"	Home Depot in Reno (link)	We might have them in the tool fort
1	Teflon Tape	Home Depot	
1	Tru-Blu Pipe Thread Sealant with PTFE	Home Depot	
1	PEX-B cutter		I might already have this in the LED Lab
1	2" Ratcheting PVC cutter	Home Depot	
1	Assortment of wood screws	Amazon	
1	Storage packout on wheels for all plumbing parts and tools	Home Depot Milwaukee Packout	probably best to buy this at Home Depot in person

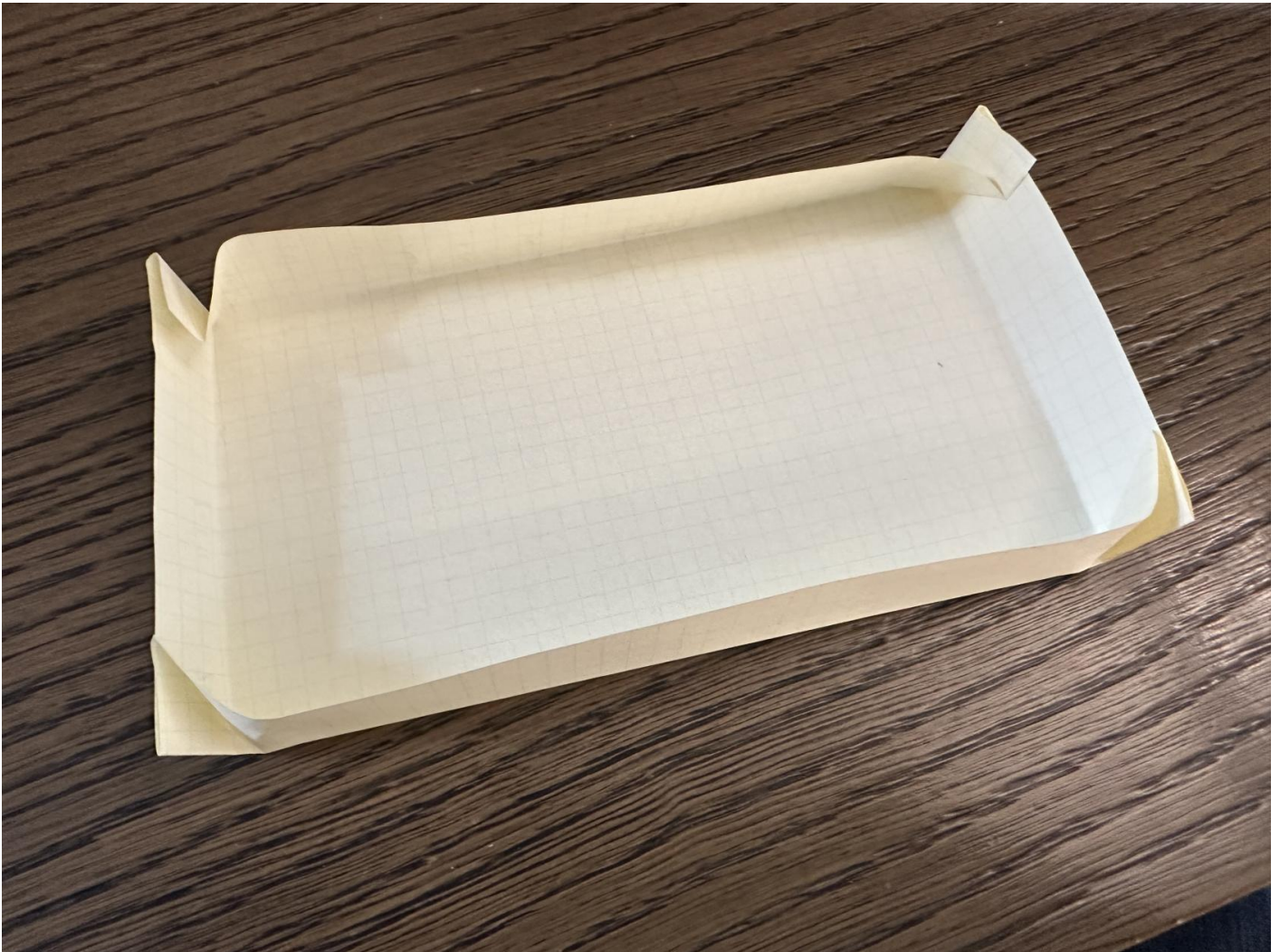
Gayflower Leak Prevention

If one of the black or grey water tanks leaks, it pretty much goes straight onto the playa. There was a small leak in 2024 mostly caught in a bucket. This page is mostly a thought experiment in how we could solve this by constructing a bathtub out of a pond liner.

The idea

We install a "bathtub" around the entire grey/black water tank area to serve as secondary containment. This could be made out of a 45mil EPDM Pond Liner which seems like it would be bulletproof. There is also something called RPE which is even stronger.

The pond liner would be folded in the corners as follows:



It is probably enough for the sides of the liner to be 8" - 12" to create a large basin that could handle a serious spill.

At the front of the truck, the corner folds would be permanently glued together with EPDM pond liner adhesive.

At the rear of the truck, we would construct a low gate (like on the back of a pickup truck), hinged at the bottom, out of wood, with very heavy duty latches holding it up. The gate would be connected to the pond liner. It would remain up/closed during the week to seal the bathtub and provide protection. It could also be lowered off-playa to drain the tanks using the hoses provided. In the event of a an emergency spill, we would pump the grey water out of the bathtub before attempting to open the hinged door.

Remaining Questions

I don't know how easy it would be to retrofit this, since there is a subfloor above the tanks. Here are some questions to study:

1. How hard is it to work in that crawlspace?
2. How is the subfloor above supported? Is it supported entirely from the sides, or are there columns coming down in the middle which would interfere with layout out a pond liner?
 - 2.1. If there are columns of some sort, can they be removed temporarily so that the pond liner, with some protection, can be slipped underneath.
 - 2.2. Otherwise would we be able to do two separate pond liners, for left and right sides of the truck?
3. What are the exact dimensions of everything?
4. While we're working on this, could we reinforce the subfloor in back which holds the fresh water tanks?

2025 Shortcut

For 2025, knowing that there is already a little bit of a black liner on the floor (as seen in this picture), we could probably improve the situation a lot by just extending the liner in the very rear to create that flap in the back. This can be done without taking out the tanks and relining everything. It would probably be sufficient to prevent leaks like this year's small leak, although it would not be that helpful in case of a more significant failure.



How we might do this:

1. Get a 2x10 board (at least the length that the interior is wide, probably 101"). Maybe this is 2 pieces of 1" plywood glued together? Cut it to size in Empire.
2. Get a bunch of hinges so it can open and close
3. Get some latches for the sides and middle to hold it closed
4. Get a big sheet of super thick EPDM, say, 15' x 3'. Glue it to the existing liner and then run it up the side of the wood board.

There is not that much space for the new door behind the rearmost tanks. It might have to be mounted in the steel frame of the truck doors.