

***Does the size of the gravel used in an infiltration trench matter?***

**Joan Douglas:** Yes, it does matter. The allowed 3/4 to 1.5-inch diameter clean washed drain rock will give you the 40% void space capability that will be required for infiltration. Pea gravel does not provide a 40% void space.

***How do you make sure the homeowners are cleaning the BMPs?***

**Shay Navarro:** TRPA Code requires BMPs to be maintained to stay in compliance. Anytime someone comes in for a permit for property improvements, existing BMPs have to be shown on the plans and maintained to pass the final inspection. For priority commercial & large multi-family properties with BMP certificates more than 5 years old or for BMP complaints that we receive, we send certified letters indicating maintenance is needed to stay in compliance. Once maintenance is verified the BMP certificate is updated with a current date.

***Cover piles of dirt to prevent wind from spreading sediment? Does this mean leaf blowers are not allowed?***

**Shay Navarro:** I don't think we have anything prohibiting leaf blowers but sediment needs to be blown into a stabilized or vegetated area not just blown down the street where it will still enter the storm drain system and make its way to the lake.

***Have any forms, spreadsheets, and detail requirements been updated in the last couple years which would require our office to update our templates? Maybe not "require" but would be helpful to update and revise for permitting and construction?***

**Shay Navarro:** The most up-to-date forms, spreadsheets, and details can be found on our website TahoeBMP.org. We update the calc sheet every 6 months with the latest assessor parcel data so getting these materials off our website each time is the best way to ensure you are using the most current version.

***Whenever I install a basin I never line the bottom with rock because it is way easier for the homeowner to maintain, but I've never checked to see if that's ok with the TRPA.***

**Shay Navarro:** The bottom of a basin can be vegetated; it does not have to be lined with rock. If the slopes of the basin are 2:1 they will need to be stabilized with angular rock, if less steep, vegetation is ok to provide stabilization.

***Will we have access to the recording of the webinar?***

**Shay Navarro:** Yes, we are recording the webinar and will post to our website when finished. We will send out an email to everyone with details on where it can be found online.

***Is it just 12" out from a drip line no matter how many stories? I'm thinking back to the old 12, 18, 24-inch rule of thumb.***

**Sarah Traiman:** Standard dripline trench widths are 1 story = 18"; 2 story = 24"; 3 story = 30"

**Shay Navarro:** And yes, only 1 foot added on either end (to account for environmental variances such as snowmelt, wind, etc.) The 18, 24, and 36-inch dimensions are trench width standards.

***Do slate chips and pea gravel qualify for armoring?***

**Shay Navarro:** Slate chips and pea gravel can be used for armor and fire defensible space but not on sloped areas nor under roof driplines. (Bear in mind – slate chips break easily when walked on, can easily slip out of place, and do not allow for infiltration. Pea gravel does not provide a 40% void space.)

***What's the rule on artificial turf? Can it be used in a swale and does count towards lot coverage?***

**Shay Navarro:** Artificial turf does count as coverage.

***Is that our cost documentation? Or do you want a receipt for drain rock?***

**Shay Navarro:** Cost documentation can include cost for labor to install, the cost to permit the project as well as the cost for materials.

**Homeowners can see they have a TRPA BMP Certification via the LT Info website and they tell me they are compliant because they have a BMP certification from 2010 but they've performed no maintenance and don't intend on doing so. It would help homeowners understand requirements if the time validity of BMP Certificate and the link to requirements needed to keep the BMP Certificate valid would be disclosed on the same page that says they're certified.**

**Shay Navarro:** Thank you for that suggestion on posting information on maintenance requirements on the Parcel Tracker.

**You touched on area-wide/regional treatment...is there a timeline for specific areas? Is the goal to cover majority of basin communities?**

This is something that is newer so there are not a ton of area-wide locations and it really requires coordination with the local jurisdictions and their priorities - where are their priorities to install public improvement projects that can actually facilitate accommodating runoff from the private side as well. There are some areas in the works, and I feel that more area-wide projects have been seen in the CSLT city limits primarily because of the topography - it's flatter - they have a lot more area to accommodate runoff. Places such as Incline are already so steep and very constrained even to accommodate the runoff in the right-of-way that they would rather see all private properties install full infiltration BMPs where they can. So, it is a work in progress, but it is on project by project right now.

**So you can use artificial turf if you are not over coverage?**

**Shay Navarro:** If you want to use artificial turf, you need to have available coverage.

**Any chance you will change the coverage rule on artificial turf since it has perforation?**

**Shay Navarro:** Right now, artificial turf is considered coverage. We did put forward a proposal to consider artificial turf as part of the coverage exemptions and potentially being eligible for the 25% pervious coverage reduction. However, that was not approved beyond the staff level, and I think the thought there at the time was to not introduce more plastics into the environment. But it is a changing topic especially on the California side with drought and California regulations that allow for artificial turf so I feel like there could be some change there but for right now artificial turf is considered coverage.

**Can you go over the rule on taking water from the lake?**

**Shay Navarro:** I am assuming that this means sometimes people want to take water from the lake to irrigate. And all of the water in Lake Tahoe is regulated as part of the Truckee River Operating Agreement or T.R.O.A., so unless you have a legitimate connection, you are not allowed to take water from the lake to do irrigation.

**French drains need cleanouts? What is the maintenance plan for such drainages?**

**Shay Navarro:** Anytime there is an elbow or a 90-degree turn in a French drain or perforated pipe there should be a cleanout port where you can flush out the pipe. And when you are filling out the BMP Maintenance and Inspection Log, we do have standard maintenance language for different BMPs and subsurface infiltration is included in the log. Sometimes the port looks like an RV sewer port that you can just twist off.

**Flushing with large amounts of water seems like it would cause more run-off.**

**Shay Navarro:** Your French drain system should be connected to an infiltration system so any water that's being put through there should be able to be infiltrated at the end.

**Shay Navarro:** That is all of the questions. Thank you to everyone for attending this webinar for contractors and installers!