

MEMORANDUM

TO: Water Right File 97-7521

FROM: Daniel Nelson – Analyst 3

DATE: May 6 2020

SUBJECT: Licensing Review of Water Right 97-7521

The field exam for this right was performed by Certified Water Right Examiner Thomas E. Mullen of Northwest Groundwater Consultants, LLC. Mr. Mullen recommended a diversion rate of 0.52 cfs and annual volume of 39.4 af.

History and Overlap:

This municipal provider has 3 existing water rights. The first two water rights are 97-2053 (0.06 cfs and 42 af) and 97-7013 (0.15 cfs and 58.1 af) from a spring source for a combined total of 0.21 cfs and 100.1 af. The third right is water right 97-7291 that diverts 0.27 cfs and 42 af from one of the 2 wells associated with this permit. When all three of these rights are combined is 142.1 af.

According to the field examiner, the permit holder hasn't used the springs since 1989 or 30 years. It appears as though permit 97-7521 and existing water right 97-7291 were developed to replace the spring sources. A condition was placed on the permit to limit the water use diverted from these wells to the volume allowed by the existing water rights or 142.1 af.

Water right 97-7423 is a municipal use within the service areas described by this permit and water rights 97-2053, 97-7013, and 97-7291. The field examiner removed this place of use from his map, so I will remove the place of use in the shape file at licensing. The place of use for water right 97-7423 does appear to have a portion of the place of use in the service area described the field examiner. The place of use for 97-7423 was based on old maps and parcel information. The parcels and maps have changed, so the water right should not be considered an overlapping water right.

Water rights 97-4081, 97-4082, 97-4083, and 97-7000 are for Kokanee Trailer Park. Kokanee Trailer Park is now the Kokanee Park Subdivision operated by Kokanee Park Home Owner's Association (KPHOA). Kokanee Park Subdivision is included in the place of use for this permit. The points of diversions for 97-4081, 97-4082, 97-4083, and 97-7000 are not the same points of diversion authorized for any of the permit holder's water rights. Statutory claim 97-4082 is an irrigation right from Priest Lake. Statutory claims 97-4081 is a domestic right from a spring. Statutory claim 97-4083 is a domestic right from ground water. License 97-7000 is an irrigation and domestic right from ground water. None of these rights were included in the combined limitation condition for this permit. The field examiner was unable to determine whether or not the KPHOA is still using spring water or not, so until the statutory claims have been decreed, it would be best to exclude these rights from any combined limitations.

On May 8, 2020, I contacted Mr. Mullen to address these issues. In Mr. Mullen's May 15, 2020, email, he confirmed that the water rights for KPHOA are still be used for Kokanee Park Subdivision. I asked Mr. Mullen to provide the amount of water supplied to Kokanee Park Subdivision by the permit holder. In a telephone communication with Mr. Mullen on May 28, 2020, he stated that the permit holder didn't monitor the amount of water delivered to Kokanee Park Subdivision, so there was no way to tell how much water the permit holder supplied Kokanee Park Subdivision. Mr. Mullen also stated that the water delivered to Kokanee Park Subdivision was only used for culinary purposes. Mr. Mullen could tell me that well water authorized by statutory claim 97-4082 is mixed with the permit holder's water to supply the in-house or culinary water from Kokanee Subdivision. The irrigation for Kokanee Park Subdivision is diverted from the Priest Lake under the authorization of statutory claim 97-4082. Mr. Mullen stated that he could not find out from KPHOA if the spring water is used, and if it is used, how it would be used.

Point of Diversion:

The points of diversion for this permit include 2 wells. Well #1 is an older well, and Well #2 is the newer well. This permit authorizes diversions from each of the wells. Water right 97-7291 and this permit are both diverted out of Well #1. This permit is the only well diverted out of Well #2. Both wells are on US Forest Service lands.

The permit holder only has 2 wells as points of diversion. Water right 97-7291 describes the well associated with this right at a different location. Per the field examiner, the legal description for 97-7291 is in the incorrect legal description. A water right transfer will be needed to correct the point of diversion location for 97-7291. The wells are correctly described in this field examination.

It should also be reiterated that Outlet Water Association supplies water to the KPHOA. KPHOA has their own water system and supplements that water system with Outlet Water Association water. Outlet Water Association can supply water to KPHOA, but KPHOA does not and cannot provide any water to Outlet Water Association's system.

Place of Use:

The place of use for this permit didn't match the place of use for the existing water rights. The place of use for the existing water rights shows a much smaller place of use, and includes a place of use on the other side of the lake. I contacted Mr. Mullen and in his May 15, 2020, email, he confirmed that there are no pipelines across the lake and all of the place of use for the permit holder should be on the north side of the lake.

Mr. Mullen excluded two portions of the permit place of use. One portion of the place of use that was removed was the Three Waters Park Subdivision. Three Waters Park Subdivision is served by its own water system authorized by water right 97-7423. The removal of the place of use of Three Waters Park Subdivision is reasonable, and it will be removed from the place of use shown with the license.

The second portion removed was three parcels that are not attached to the system. I have gone back and forth whether to retain these parcels in the place of use or not. I decided to remove them since the Mr. Mullen removed them from his maps. These three lots are **NOT** the 3 lots stubbed in. They have their own individual water systems, and not connected in any way to the permit holders existing system. The field examiner clearly states in his narrative that these three lots are not served by the permit holder, and are on their own water system.

The stubbed in lots were specifically described by the field examiner. I did find the following parcels without a home built on them. They are Tax 42, Tax 45, Tax 49, Blk 2 Lot 2 Match Bay Subdivision, Blk 2 Lot 10 Match Bay Subdivision, Lot 1 Lamb Estates, Lot 3 Lamb Estates, and Lot 7A Three Waters Park Subdivision. With 8 lots without a home, it is safe to assume that there is 3 stubbed in lots within this group.

Diversion Rate:

The maximum diversion rate of 0.52 cfs measured by Mr. Mullen for the well capacities seems very reasonable. Mr. Mullen states in his field report that the springs have not been used since 1989, and that water right 97-7291 was diverted from Well #1 was approved. The springs haven't been used in 30 years, so the total system capacity would be 0.52 cfs measured from the wells by Mr. Mullen.

For most municipal water rights, we only try to license the peak instantaneous use and not the pump capacity. However, this municipal use is for a subdivision, and really doesn't fall into the same standards used for a city or water and sewer district. In order to determine if the 0.52 cfs provides a beneficial use, I had to use several different processes to determine if 0.52 cfs is a reasonable diversion rate for this municipal use.

The first step I used was to use the chart provided in Administrative Processing Memorandum #22 to determine the in-house use requirements for 135 homes and 3 stubbed in lots. According to the chart, the in-house use alone for 138 home is approximately 0.50 cfs.

The second step was to determine the usage from the campgrounds. The field examiner stated one campground had 4 hydrants and 2 flush toilets, but didn't mention how many hydrants the other campground had (this campground has no flush toilets). Since the second campground has more campers, I assumed it had at least 4 hydrants. According the Public Building Water Requirements tables, a fixture generally use 1 gallon per minute per fixture. Therefore, the two two campgrounds would require at least 10 gpm or 0.02 cfs ($10 \text{ fixtures} \times 1 \text{ gpm} = 10 \text{ gpm} / 448.8 = 0.0222 \text{ cfs}$). The in-house use and the water use in the campgrounds already meet the 0.52 cfs capacity, but the irrigation component needs to be addressed.

The final step was to determine the amount of acres irrigated. This is a very difficult number to determine, since the parcel sizes vary dramatically. A large number of these homes are vacation homes, and there is very little irrigation being done for those home. I was not able to find any irrigation at either of the campgrounds, so that helped a bit. I did find irrigation on various lots ranging from 0 to 0.5 acres of lawn. The majority of the parcels are $\frac{1}{2}$ acre lots, so I used a very conservative number of 0.1 acres per parcel, or a total of 13.8 acres for the 138 parcels included in this permit. At 13.8 acres, the diversion rate requirement would be 0.28 cfs ($13.8 \text{ acres} \times 0.02 \text{ cfs/acre} = 0.276 \text{ cfs total}$).

When you add all of these diversion rates together, the maximum diversion rate requirement would be close to 0.80 cfs ($0.50 \text{ cfs} + 0.02 \text{ cfs} + 0.28 \text{ cfs} = 0.80 \text{ cfs total}$). A maximum diversion rate requirement of 0.80 cfs is much greater than the 0.52 cfs system capacity requested by the permit holder. It also must be noted that KPHOA also has their own water rights, and only use the permit holder's water to supplement their own water use. The KPHOA supplies water to 36 residents, which would account for approximately 26% of the domestic and irrigation diversion rate ($[36 / 138] \times 100 = 26\%$). The total domestic and irrigation use is 0.78 cfs, and 26% of that flow rate would be 0.20 cfs ($0.78 \times 0.26 = 0.20 \text{ cfs}$). If you remove the 0.20 cfs diversion rate from the 0.78 cfs needed for this subdivision, you come up with 0.58 cfs, which is still above the system capacity.

The above calculations show that the 0.52 cfs capacity is well below what this municipal system can beneficially use. Water right 97-7291 is also diverted from one of the two wells, so the diversion rate for that water right will need to be removed from the well capacities. This would reduce the diversion rate that can be recommended for this permit to 0.25 cfs (0.52 cfs – 0.27 cfs from 97-7291 = 0.25 cfs). There is currently a condition on the permit that limits water rights 97-2053, 97-7013, 97-7291, and this permit 97-7521 to 0.56 cfs and 142.1 af when all these rights are combined. The 0.56 cfs the rate originally approved by this permit, so it should be reduced to 0.52 cfs when all these rights are combined.

Diversion Volume:

A volume is required on this license, since the place of use that does not serve incorporated cities. The actual diversion volume of 35.8 af was supplied by Mr. Mullen. It should also be noted that there are 3 stubbed in lots, which would add an additional 3.6 af to allow additional water for those parcels at 1.2 af per parcel.

Mr. Mullen states in his field report that the springs have not been used since 1989, and that water right 97-7291 using Well #1 was used exclusively for the subdivision. The springs haven't been used in 30 years, so the total system capacity would be 0.52 cfs measured from the wells by Mr. Mullen used continually all day long for 365 days or 376 af (0.52 cfs X 1.9835 X 365 = 376.4683 af). The system capacity is much less than the measured amount, so we will need to use the volume measured plus the 3 stubbed in lots.

The volume measured is much less than what a typical municipal type water system supplies to 138 homes and a campground. Typical domestic uses average approximately 1,070 gallons per day per home ([1.2 af X 365,850] / 365 = 1,071 average gpd). Using the volume that was actually measured limits the average gallons per day per home is 236 gpd using the following formula:

$$\begin{aligned} 35.8 \text{ af} \times 365850 &= 11,665,430 \\ 11,665,430 / 365 \text{ days} &= 31,960 \text{ gpd} \\ 319,631 / 138 \text{ homes} &= 231.6 \text{ gpd per home} \end{aligned}$$

This average is typical for vacation homes, but I am concerned that if we limit the volume to the measured amount the permit holder will need to file for another permit if these parcels are converted over to full time residency instead of vacation homes. After speaking with Department staff, it was determined that we could not authorize more volume than what was measured during the development period plus the 3 stubbed in lots. Therefore, the volume for this permit should be licensed at 39.4 af as recommended by the field examiner (35.8 af measured + 3.6 af for 3 stubbed in homes = 39.4 af). A volume of 39.4 af is justified for this use just based on the number of homes being served.

There is the condition on the permit that limits the volume when water rights 97-2053, 97-7013, 97-7291, and this permit 97-7521 to 0.56 cfs and 142.1 af when all these rights are combined. The 142.1 af is the total volume when the existing rights volumes are added together, so we need to keep that amount. They are clearly not diverting this amount of water, but we must carry this condition forward. Administrative Processing Memorandum # 6 clearly states that we are limited to 3 significant figures. Therefore, we need to change the 142.1 af to 142 af. This should not be an issue, since the actual water use is much less than the 142 af. This shouldn't be an issue, since the current system capacity is 39.4 af, and the water rights for the springs haven't been used in 30 years.

Conditions:

The permit has an X35 condition that limits the use of water when all of the permit holder's rights are combined to 142.1 af. A second X35 should be added that limits the permit holder's rights and the KPHOA rights to 167 af, but the three of the four KPHOA rights are statutory claims, so they cannot be included in combined limitation conditions for licensed rights. Therefore, I feel it would be too confusing to include the one licensed right owned by the KPHOA, 97-7000, into the combined limitation, since we don't know if 97-7000 is still being used any longer or how it was used. I would think that once the KPHOA rights are decreed, a combined limitation condition should be added to them that includes the water rights for Outlet Water Association.

Conditions X35, 180, 128, and 004 should be carried forward to licensing. The existing X35 condition should be altered to meet the significant figure standards of Administrative Processing Memorandum #6. The special US Forest Service condition should be removed, since it has already been addressed in the permit. The US Forest Service condition cannot be enforced by the Department, so it is not reasonable to maintain it on the license.

MEMORANDUM

TO: Water Right Permit File 97-7521

FROM: Daniel A. Nelson

DATE: May 28, 2020

SUBJECT: Telephone Call with Thomas Mullen

On May 28, 2020, I spoke with Thomas Mullen, the certified water right examiner who completed the field report for permit 97-7521. In this telephone call, Mr. Mullen informed me that Outlet Water Association doesn't meter the water that went to Kokanee Park Subdivision. Outlet Water Association charges a flat fee for their water, so they don't know how much is used by the individual subdivisions serviced by their organization. Mr. Mullen did tell me that all of the water delivered to Kokanee Park from Outlet Water Association is used for in-house use only.

Water right 97-4082 from Priest Lake is still used for irrigation for the subdivision. Water from the well authorized by water right 97-4083 is also still used for in-house use only within the Kokanee Park Subdivision. The water from the subdivision well and Outlet Water Association's wells are intermingled at a separate storage facility that only services the Kokanee Park Subdivision in-house culinary water.

The water users still didn't know or didn't want to divulge how the water from the springs for irrigation by water right 97-7000 and for domestic use by statutory claim 97-4081 was associated with the system. Therefore, it is unknown if these springs are still used or not.

I then informed Mr. Mullen that I would probably need to include a combined limitation of the water rights as listed on the permit, and an additional limitation when those rights are combined with the water rights for Kokanee Park Subdivision.

Nelson, Dan

From: Nelson, Dan
Sent: Friday, May 15, 2020 1:18 PM
To: 'tfmullen@northwestgroundwater.com'
Subject: RE: Permit No. 97-7521

Hello Tom,

It will take me a bit to digest this information, but it appears as though these rights could address some of the shortfall of on the amount of water actually diverted for this water system. When you get me the information from Mr. Horey, I will have a better idea on how I am going to address these rights in my recommendation to my supervisor. Any delivery information OWA has for this Kokanee Park HOA would also be helpful.

I appreciate you getting me this information. We need all the facts when we are reviewing water rights for licensing, and it is really difficult when you have multiple subdivisions like this situation. I am back in the my office full time now, so I am able to get things done a bit quicker. I will hold this permit until June 5th to give you time to get the information from Mr. Horey.

Thank you for your hard work.

Dan Nelson.

From: tfmullen@northwestgroundwater.com [mailto:tfmullen@northwestgroundwater.com]
Sent: Friday, May 15, 2020 11:58 AM
To: Nelson, Dan <Dan.Nelson@idwr.idaho.gov>
Subject: RE: Permit No. 97-7521

Good morning Dan,

I was able to get some information on these overlapping rights, albeit it may be not entirely conclusive. I'll summarize my findings according to the two groups.

Kokanee Park Water Rights

I spoke with Rick Horey – President of Kokanee Park HOA. Mr. Horey communicated the following information relative to each of the water rights:

97-4081 – Spring source for domestic – Mr. Horey did not know if this source was still being used. He indicated he will need to research this with other board members in the next couple of weeks.

97-4082 – Priest Lake source for irrigation – Kokanee Park draws water from the lake for irrigation only (i.e., lawns). Lake intake is subject to lake levels and is distributed in a dedicated system.

97-4083 – Groundwater source for domestic – In addition to the water supplied by the Outlet Water Association (OWA), Kokanee Park supplements potable water from a well. Water from both the OWA and Kokanee Parks well is piped into a reservoir and then distributed to the homes within Kokanee Park. The agreement between Kokanee Park and OWA specifies that the water cannot be used for irrigation. Further, it is distributed in a separate system from the Priest Lake irrigation water.

97-7000 – Spring source for irrigation - Mr. Horey did not know if this source was still being used. He indicated he will need to research this with other board members in the next couple of weeks. Mr. Horey thought it might be possible that this spring is the same as for 97-4081, but needs to confirm.

Outlet Water Association Overlapping Water Rights

97-2053, 97-7013, 97-7291

Outlet Water Association does not serve any water to the area south of the river, nor do they have a water line to the same area. They are not sure why the boundaries were drawn in as currently shown in the respective licenses. As indicated in the Beneficial Use Field Report, OWA has not used 97-2053 or 97-7013 (spring sources) for over 30 years and intend to relinquish these water rights. As for 97-7291, I would recommend a water right transfer to correct the place of use.

Please let me know if you have additional questions and/or if you need additional information.

Thank you

Tom

From: Nelson, Dan <Dan.Nelson@idwr.idaho.gov>

Sent: Thursday, May 7, 2020 2:35 PM

To: tfmullen@northwestgroundwater.com

Subject: RE: Permit No. 97-7521

Dear Mr. Mullen;

I have had the opportunity to review the field report you submitted for permit 97-7521. I did find a couple of overlapping water right issues that need to be addressed. Unfortunately, I wasn't able to go through these issues until I could do an in depth review of the permit and the field report. Your field report was very well done, but we do need to address a couple of issues with the overlapping water rights. I will address each issue below.

- 1.) Water right 97-4082 is an irrigation right 37 acres from Priest Lake for Kokanee Trailer Park. Water right 97-7000 is an irrigation right for 12 acres from a spring for Kokanee Trailer Park. Water right 97-4081 is a domestic use from a spring for a 26 home mobile home park known as Kokanee Trailer Park. Water right 97-4083 is a domestic use from a ground water for the same 26 home mobile home park known as Kokanee Trailer Park.

The Kokanee Trailer Park is now known as Kokanee Park Subdivision. You state in your field report that this Kokanee Park Subdivision is served by the permit's water system. However, the Priest Lake, spring, and ground water diversions associated with Kokanee Park Trailer Park are not the same diversions described for the system associated with this permit, and you didn't address these rights in your field report. Therefore, I need you to give me some type of narrative as to what has happened to these water rights, and whether or not they are still being used. Please see the attached overlap map #1 that shows the points of diversion and place of use of the Kokanee Trailer Park water rights.

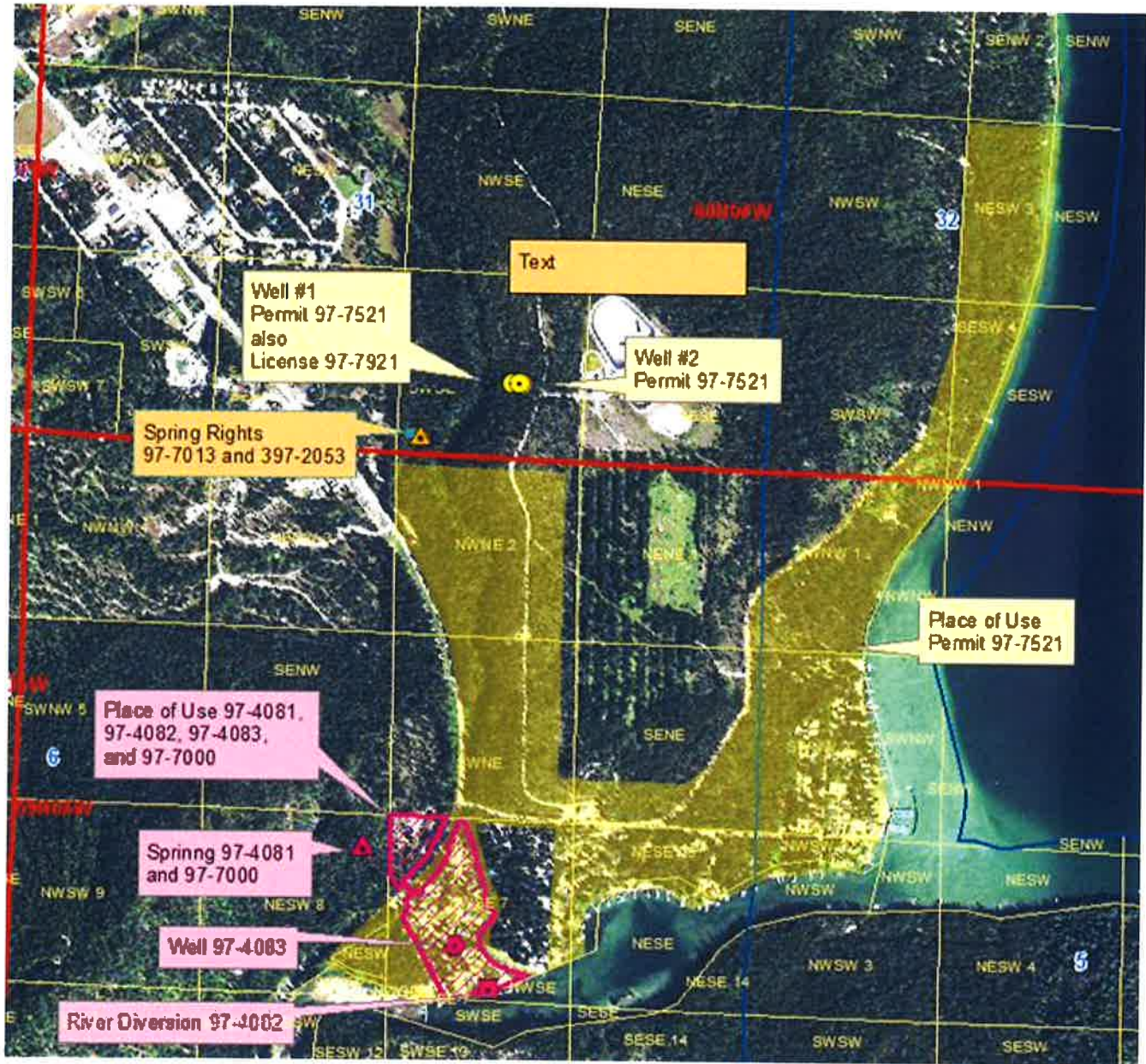
- 2.) The location of the place of use for all three of the existing overlapping water rights for Outlet Water Association show the place of use as being on both sides of the Priest River. You need to address the place of use for the other rights to explain if their places of use are either incorrect or that there is a pipeline that supplies water to the other side of the river. If they are supplying water on the other side of the river, then you may want to include that side of the river in the place of use or talk to them about filing a water right transfer to correct the place of use of the other 3 water rights. Please see the attached overlap map #2 for the places of use for the overlapping water rights.

All I need to answer the above questions is an email explaining what is happening with these overlapping rights. I would appreciate it if you could give answers to the above two issues within the next 30 days. I am working with my supervisor to address an issue concerning the volumes recommended for this permit, so I may be contacting you later to discuss the volume if necessary.

Respectfully,

Daniel Nelson
Water Right Analyst 3
Idaho Department of Water Resources
Telephone (208) 287-4856
Fax (208) 287-6700 (attn: Dan Nelson)

Permit 97-7521 Overlap Map #1



Permit 97-7521 Overlap Map #2

