# The Gauge, Guide- & Log- book Problem (Paddle-IT)

What we like, dislike and dream up about Digital Tools for Paddlers

ARCHIVED
We don't actively use this doc. anymore. For current activities, see the UPDATE Block below.

NOTE:
This document is heavily work in progress, It is currently a weird mix of Documentation, Discussion, and brainstorming notes.

By now, the document is hard to read, as we abused it also for discussion (coloured text). As a first-time reader, maybe you first want to ignore the coloured stuff.

UPDATE:
We now opened a Slack Channel for discussion.
https://join.slack.com/t/paddling-hacker/shared_invite/enQtMjQ1MDc1MTk5ODQwLTc1OTE1MWVlOTYwMWQ5OGY4Zjc1YjgyNGUzZWVkNGQxZTc5YjhlNDE5MzI4ODhmZDRmN2FiNzAyY2EwY2NkYTA

Active collaboration and discussion is happening there.
As of June 2019, Active discussions and dev. work is happening around sharing data, switching to creative-commons type licenses, creating common codebase etc.
We use a bunch of different Google docs to summarize things up, unless someone has a better idea.
As we have no other summary-document yet, this is still the "best" introduction to the initiative.

Auhor:
This document is mainly written by Thomas Rogenmoser, aka toro.
toro@kanuschule.ch +41 76 330 50 09
Other contributors are marked with colored text.
My motivation to do this comes from pain-points that i have as a user and from ideas of what could be done.
I was not satisfied from contributing content to different projects , so i decided to try contribute through analyzing existing projects, gather new ideas, spread them, initiate collaboration between existing projects.

By Job, i run a Kayak-school / Rafting-Business / Paddler-Shop ([www.kanuschule.ch](www.kanuschule.ch))
By education, i am an electronics- engineering guy,
By hobby… well, i paddle. Squirt, Freestyle, Creek, whatever Whitewater.

# 1 Abstract

This document is about helping the development of existing digital tools like Websites and Apps for paddlers by:
- collecting infos on existing projects: What's there, what's their problems and wishes
- collect info on existing discussions about possible development
- bring existing projects together to make them stronger
- bring in new ideas of tools not yet existing

**The problems a User (Paddler) faces:**
If i want to go paddle, i need to know where it's good to go.
Before the Web i asked Guidebooks, asked Friends, asked my memory, asked my (sparse) notes, aka Logbook.
Online gauges and guidebooks made a lot of this planning easier. Mainly the availability of flow-data has progressed incredibly far.
There is still room for progression on obtaining raw flow data, but the part most lacking behind in my eyes is the interpretation of this data. We still do the same as we did in Paper-book times: There is generally only one set of fixed values for min. med. max. levels, regardless of what type of paddler i am. This is not a lot of info.
It seems to me like much more would be possible there.
Also, there's statistical runnability-infos ("normally runnable in may during snowmelt", "runnable after heavy rains, runs off quick") only in the guide-books, as it was written by the author. Why not do these statistics with all the gaugue data out there?
**The problems a content-contributor (to eg. an online guidebook) faces:**
In which project will i reach the most users? Which will last the longest, is most sustainable? How much work is it to contribute the same info to multiple projects? What happens to my contributions if a project is abandoned?
**The problems a project owner/maintainer faces:**
Once my project is somewhat successful, how can i spread the work to more shoulders, how can i someday pass the torch on to someone else? If the project is about to be abandoned, can i do something to keep all the data, the user input "alive", eg. pass it on to some other project? Do i even have that permission from my content-creators?

From talking with people from many projects, it's clear that many have similar problems. That is mainly lack of time/motivation, lack of new staff. Most all are in some way ready to talk about cooperation between projects.

So personally, i imagine these already existing online resources could start to connect in some ways, to become more sustainable and more practical. And i hope they would incorporate some features i miss for now. Mainly a tool helping me keep a Logbook of my paddling. Something where data is filled automatically as far as possible.

As i am no big programmer, i can only contribute in other ways than programming. Like summarizing the problem, talk about it, think of solutions…

And spawn some ideas into your head too.

Thanks for reading till here,

this is where the hard rapids start ;-)

# 2 Table of Contents

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# 3 About editing here

Currently everyone can add Comments, some people can edit. Ask to get editing rights too.
**I think this doc. is already becoming the wrong tool for the job, pls. suggest better tools.**
See also Documentation

If you have anything to add, you'd better join our slack channel than add to this here.
~~If you add to this document, do it with a Color and add your initials, so it is easy to See who did what.~~

- Toro [White] (Started this Document)
- toro answering/commenting add (TR)

- Tim Lloyd (TL) (Rivermap programmer)
- Florian Bessière (FB) (RiverApp founder)
- Fredy Riner (FR) (Rivermap contributor)
- Alex Amarax [AM] (IT guy, Rivermap user)
- Marie-Laure Aix [MA] (Rivermap contributor)
- Nicolas_Fournials [NF] (Rivermap contributor)
- Michele Ramazza (MR) (IT Guy)
- Mike Krutyansky (Whitewater Guide founder)
- Hans Hochstrasser (HH) (User, Teacher@Kanuschule, Sport Coordinator@Kanu-Club Luzern, IT Expert for blind users)
  (I was not able to pick a background color
- Rob Tuley, (RT) rob@openknot.com Author, coder & maintainer of Rainchasers (UK paddling guides & levels)
- Vincent Lecrubier (VL) (VP in charge of digital development at french canoe federation)
- Laurent Guyot (LG) French paddler and community manager of eauxvives.org
- Daniel Brasuell (DB) AWetState.com author
- [ Add your name, initials and pick a color...]

# 4 How to proceed

## 4.1 Find a name

(Is i t a project? Maybe more an Initiative… )
Maybe someone has a nice idea for a name?
The title is already long, but does not cover all possible aspects (eg. Accident reports).

## 4.2 Find Documentation/collaboration tool(s)

✓ As we decided to go with Slack to communicate for now, and use Google docs to document our findings, I still think other tools could be better.
**SUGGESTIONS**?

I think this doc. ~~could~~ HAS quickly become not-so-practical…
Suggestions on a better tool for keeping notes of the collaboration are needed: forum? wiki? slack? …
I have no experience for something like this…

Maybe use the issue-que of Github? allows to set tags, (eg.
https://github.com/NickeManarin/ScreenToGif/issues)
There are also other tools like a wiki available…

[AM] I beleive slack.com is recognized tool for such a discussion. But you need to spend some time to get familiar with the idea of channels, boards and etc there. It also gets

integrated easily to many other org services (like drawing and mindmaps). I really enjoyed it collaborating in another project.
Another tool for organizing team collaboration (with boards, todos and other) is trello.com.
But it's more for development and tasks tracking/assignment than discussions.

(RT) I use Slack extensively for work, it's pretty much replaced email for me there. It is good, has a suitable free tier and isn't that hard to fathom IMO. Happy to set something up if needed?

An IT-Expert pointed me at **freedcamp**, had no time yet to investigate this deeper.

Slack alternatives
http://blog.capterra.com/the-top-13-slack-alternatives/
There's one alternative called Ryver…
Promising name. All free, easy to migrate to, should we hit limits on slack.

## 4.3 Have a Meeting

To get a deeper discussion going, one idea is to do a meeting (and bring boats).
This could be some place closest for all participants.
Or something online.
Or all of it.
FB: I would be happy to meet you (also with kayak ;-) ). I think I have time most of the week-ends in April excepted 15-16 April (I will be on the Soca) and in the beginning of Mai. In May and June I will be on the road in the Alps between France and Germany with VW Bus, baby, kayak...etc for one month.
FR: Ich hab ein bisschen ein Zeitproby D Cyberspace y Ctrl x lem. Bis Ende April bin ich sehr beschäftigt geschäftlich, den ganzen Mai bin ich dann in den USA. Wenn Tim dabei ist, ist für mich auch gut. Ich muss nicht unbedingt dabei sein.
TL: I definitely think we should meet somewhere with kayaks.
MA: I would also be highly interested in participating, with or without kayak
TR: on the Vorderrhein @ kanuschule.ch, i could offer infrastructure…

TR: OK, Let's find a time:
http://doodle.com/poll/ipce6pd2n3kytmw3
If anyone has a better idea for finding a date, go ahead...

### 4.3.1 Meeting Aug. 21st 2017

So, we agreed on a date… now, what do we all expect from that meeting?
Are there things to prepare?

Let's put all details about the meeting in a doc. open to participants only:
https://docs.google.com/document/d/1Yps1KW_CPS2YWgR_Ayh5GfeT-Tp9qEIEot12Qj16SXs/edit

### 4.3.1.1 Participants

**toro, florian, tim, stefan, marie-laure** have confirmed on the doodle,
**Sebastian Lüke** of 4-paddlers is interested in participating, maybe via remote only

### 4.3.1.2 Agenda

**Where**: Versam i think we agreed here via mail…
**When**: We meet at 9h16, Florian will arrive on that Train.

### 4.3.1.3 Pre-meeting paddle:

Tim is looking into paddling some river on sunday 20.8. Besides boats i can also arrange for accommodation.

## 4.3.2 Meeting @Paddle-Expo 2017

We already have the opportunity to do a presentation about this initiative on the Expo, but we should also try to have a discussion with as many interested people as possible…

Ideas anyone?

### 4.3.2.1 Who will be there?

Toro: tue, wed. thu.
Florian: wed.
…

### 4.3.2.2 Presentation

We can do a presentation of 3-4 minutes at the industry dinner.
But as there is not much yet to present,
It will just be a quick hello to raise awareness. Something like: "hey, we have this initiative, if you are interested in the topic, meet us after the movies, over there for more infos over some beers ".
Hopefully we will meet some new people.

Did not happen, permission was cancelled last moment...

### 4.3.2.3 Direct Meetings

I will meet with Vincent Lecrubier of the French federation FFCK.
Vincent was Not there.

Met with Dieter Reinmuth of DKV and Clemens Grossmann of apmato.com about the CANUA App

Met with Jeroen of playak.com and Florian of riverApp.
Decided to Go for a slack Channel as a First Tool to communicate.

https://join.slack.com/t/paddling-hacker/shared_invite/enQtMjQ1MDc1MTk5ODQwLTFlYjAy
MDhkYWRjNGNkMTZkN2M4YjQwMGUwOWMzMjE5YzE3MTdmMzRhYTMyYTIxY2FiMDc
wMjQ0YzMyYWMyNjg

To be decided…
Ideas anyone?

# 5 Types of paddling-tools

What (online/electronic) tools do i use/ need/ want for paddling?

## 5.1 Safety Warnings

 HH: I think you missed 2 types of tools, that seem to me most important:
- Communication of safety relevant events from paddlers to paddlers (like Rivermap
Hinweise)
- Communication of safety relevant events from official information sources like electric
power companies to paddlers (could also be covered by Rivermap Hinweise)
I think concerning these 2 points the todays situation is fatal:
- Often I would have to check 3 platforms to be sure to get all information about safety
relevant events
- it is not possible to tell the power companies, where they should communicate planned
safety relevant events (like a "Reservoir Purge")
For me standardisation seems to be a must in order to better contribute to safety.

So, that's kind of updates to river-descriptions about current, temporary changes, most
prominently safety-concerning stuff, dangers on the river.

## 5.2 Friendfinder

[AM] I'm also missing the "check in" or "going to" functionality. THere was a project called
riverchat.ch or something to easily meet up on the river. The idea behind was actually
interesting but you need some really big coverage of visitors to make it viable (like rivermap
does).
I have quite a lot of friends and it isn't always easy to write everybody "what's up, any plans
on weekend?". Would be really cool to have buttons "checkin on the put in and "going to" on

sections with options to make it visible to your friend list or public. Or even send to list of emails/instant messengers. The only problem here - you need some authorization/personalization implemented.
You say it will turn it into social network. I say yes - and it will bump any project higher because social networking is the best promotional tool.
[MA] I agree with Alex, it could be interesting to be able to show to your friends that you are going on this particular section. It looks interesting 1/ for safety reasons 2/ for economical + ecological reasons (you can fill your car easily, like with Blablacar) 3/ to meet new people
But it needs to be flexible and easy to use because kayakers are changing their mind at the last minute

## 5.3 Descriptions, guide books

Pages like ckfiumi, eauxvives give infos like paper guidebooks, but are also updated and show current water levels
(DB) As the author of a website and all the descriptions on it, I would be nervous about having my site grow into obsolescence  as it has been a  big project of mine for 11 years.  I would like to see the ability to also have the authors or founders of sites have the ability to retain their sites, and their value.  Perhaps by making this initiative a portal to the original content rather than the housing of the content.  Perhaps this is on a case by case basis for those sites which are still active.  I think it is also less of a concern for those sites that are crowd sourced.

## 5.4 Water level data

Mainly flow data, to be interpreted by user.
ex. RiverApp, rivermap.
Rivermap wants to focus on providing flow-data, and not neccessarily become a guidebook:
**Fredy Riner** to me Rivermap is not a river guide. It merely tells what sections are around and if available are current levels likely to be ok to run the section.
Beta about the section and worthiness is a whole other thing that is not Rivermaps core business. There are plenty of printed and online guide books around to cover this.
[TR] But i think users are already using it as a guidebook… i do it.
[TL]  Yes, I see that this happens.  It doesn't seem sensible to me..…
[AM]: I propose to introduce layers of information (like in google maps) - by default it could be only sections with grades and water levels (as it is right now), but I'd like to have options to see some additional layers like stars on fun/danger/scenery/physical challenge, photos, descriptions and warnings. For more info see FB thread:
https://www.facebook.com/groups/302510333157209/permalink/1531302466944650/)
[MA] I agree with Alex but we would need to talk about resources
[NF] It seems to me that Rivermap is not a riverguide and should not try to become one:
- that would just be "one more place to spread information in"
- that could make contributions more difficult, time-consuming and committing => less numerous
- that is not relevant if you use it as a map to quickly check what's doable in an area

=> A much better solution would be, IMHO, to propose an additional item "references" or "bibliography" which could indicate any link to a river guide and the associated languages. That can at the moment be done as commentary, but having a specific item would make it more "official", visible and encouraged. And that would avoid participating to spreading info among numerous websites.

[TL]  I agree with Nicolas.  We are in favour of linking to other resources (like EVO, youtube,).  This is particularly useful for resources in various languages.  Unfortunately, Facebook is increasingly damaging this idea.  People often post useful info and videos on FB, but direct linking is a bit obscure, and, of course, users need a FB login to actually see the content.

[AM] I don't agree with NF here. Look at wikipedia.It's bureaucratic, time consuming, non profitable and still popular and comprehensive. I believe we shouldn't limit people in what they are interested in and just provide opportunity to contribute (with adequate moderation and clever motivation/achievements system)

(RT) In terms of what features are wanted from level data I also think historical analysis would be a compelling feature but not currently offered anywhere to my knowledge. e.g. in particular how often is this section actually runnable; plus how quickly does it drop? For UK rivers in rainchasers the data latency from SEPA and EA (multiple hours behind) and the quick run-off often make it more user guesswork than anything and this sort of historical analysis would help inform.

(LG) In EVO's server we have store some water level data since years. You can have a look about that at this address :
http://www.eauxvives.org/fr/niveaux/statistiques

(DB) Dreamflows (California) actually does great historical analysis.  Chris (developer of the site) looks at historical data for gauges that are no longer online, and compares them to nearby gauges at the same point in the past and current flows, to then give a statistical band for current flow for the site without the current gauge.  Really cool.

## 5.5 Logbook

To keep notes of when, where, who, level, how was it etc.

- 4-paddlers has a logbook-function that can pull in waterlevels semi-automatically.

Nick Troutman:
Wants to track his vertical feet… Could be done via an actual tracking, or by an automatic reading from logbook entries, if the logbook has access to put in take out data with altitudes ...

## 5.6 Accident Reports

There are books about it, and some organisations (DKV i think) make annual reports.
An online Database could be an invaluable resource for education and prevention.

Connecting it with other tools discussed here could be interesting too.

[TL]  I think we should promote the use of the American Whitewater database.  Why re-invent the wheel?

[MA]: I agree with Tim

https://www.americanwhitewater.org/content/Wiki/aw:help:accidentdb/

https://www.americanwhitewater.org/content/Accident/view/

## 5.7 Weather infos

Mainly needed for rain- (or snowmelt) dependant runs.

Different Meteo sites… none integrated with paddling-tools…

> TL: Rivermap has a link to a weather forecast widget for each section.
> … and now we have some experimental weather overlays

(RT) On rainchasers there is a rain radar thing http://rainchasers.com/rain-radar that simply visualises recent rainfall from the UK Met office in the UK. Google analytics tells me that just under 10% of sessions use this page so there's clearly a decent user demand.

## 5.8 Route planning

Google maps&co, could be integrated more with Paddler tools.

Routing can be called directly from river map & riverApp…

What about showing distance/time from current location?

> TL: Rivermap can list sections in order of geographic distance from the current location.  This could be easier to use, but no-one has expressed much interest. It would not be hard to add routing distances and  times, but the routing services have limited free usage; some design and compromise would be necessary to control cost.  Given the map view this doesn't seem to add a lot of value.  And no-one has expressed any interest before.
>
> FB: Routing is indeed possible in the RiverApp. On the map section by clicking on the putin or take out pin you can open Apple map or Google Map to start navigation. Displaying the time/route to go there directly in the App would need the use of the expensive Google Place/Map API. Displaying an overview of the river on a map with sections and gauges is in planning and often asked by the users.
>
> TL: Talking of overviews of sections … map coordinates of actual river courses are not easy to come by.  Open Street Map have the information but there are license requirements.  One solution might be to donate the section end-points to OSM.  Of course, this would require harmonisation of section definitions.

(RT) It's an interesting thought to use OSM as a central storage of river location and meta-data, not sure how possible this is.

# 6 Current existing Tools

Which tools are currently existing out there?
**TODO**: What do they do? (guide, levels, news…) Do they have a mission statement?
Maybe put them in a table, to compare features…

There's a new list on www.it4paddlers.org


- http://www.kajaktour.de/


- paddeln.at (deprecated)
  http://www.cnet.at/paddeln/impressum.php

- rainchasers
  http://rainchasers.com/river-levels
  http://developer.rainchasers.com/

- Boatertalk
  > BoaterMap
  https://boatertalk.com/map
  > Gaugues
  https://boatertalk.com/gauges
  I'm Eric [Princen] and I started BoaterTalk back in 1996 and I've been running
  it ever since.https://boatertalk.com/forum/BoaterTalk/1052587531
  Goodbye post:
  https://www.facebook.com/boatertalk/posts/10155983385493252


- faltboot.org
  https://www.faltboot.org/impressum.php

- Worldkayak.com
  Discontinued? Project of EJ to promote kayaking worldwide


# 7 What other Sports have

Tools to look at as inspiration from other Sports:
Describe as "What is special about this one, what could be learned of it"?

- [https://www.falesia.it/](https://www.falesia.it/)
  Climbers, using the wisdom of many to have better grading, ex.
  [https://www.falesia.it/it/route/243/lumignano-classica/classica/pancia-classica.html](https://www.falesia.it/it/route/243/lumignano-classica/classica/pancia-classica.html)
  These climbers maintain an "official" grading of routes, but then also maintain a "wiki grade" based on how people graded it over time
- Strava APP
  Tracking and Social sharing could be great for paddling too.
  CANUA App does some kind of tracking…

- Mtbproject.com

- (LG) Grottocenter.org : For caver. Show in a googlemap entrances of caves. When you click on the name you have access to some info about the cave like topo and photos. It's based on a non-profit association and have contact with the International caving federation and a lot of national federation and locals club to obtain infos. Have a sponsoring to pay the server. The membership fee is € 5 and is open to all. The collected money is used for communication (stickers offered to contributors, stand at the speleology congresses, ...). Started by a group of french friends it turn to be the international reference site.

# 8 Current pains

Things that i miss in existing tools, or that are not how i think they could be

## 8.1 Why Participate?

What happens to my data, my effords?
As a user, i have to trust that my work is lasting and that i get something (immaterial) from participating.
rainchasers.com seems to be a positive exception, they give access to all their data and put it under a free license: [http://developer.rainchasers.com/](http://developer.rainchasers.com/)
(RT) Rainchasers is a learning environment for me to experiment with various tech, so I knew I'd never have time to visualise info in as many formats/places as would be needed thus the API. It has relatively light usage though tbh.

## 8.2 Poor runnability infos

Only one fixed low-med-hi rating is stone-age, compared to the advances we have in getting flow data.
We need skill- or preference-related infos

FB: we should speak directly about that because. In the App I partially solved it with custom level alarm. But displaying LW, MW and HW depending on skill is pretty hard. These values are displayed for people who does not know the river and want an estimation. Expert already

knowing the river just need to know in my opinion how high is currently the level (they can do the interpretation thenself)

*TL:  I have test versions that allow custom levels.  But to make this public we need to commit to managing user logins.  It is a big step for our very limited resources.*

*AM: I'd like to subscribe to receive alarms (in browser pop-up or/and email)  when water level on desired sections is rising rapidly or is achieving defined value. I'm really tired of pressing F5 and keep the map open just not to miss anything like rain or snowmelting. This feature I really miss in all apps/sites available. Sometimes I'm just too busy on the week to check what's going on with water and then I'm really disappointed I've missed something.*
*TR: In RiverApp you can have Alerts, seems what you want… Also on Playak…*
*(LG) Also in eauxvives : http://www.eauxvives.org/fr/niveaux/alertes*

(RT) I think you need a base guide (low/medium/high) based on average usage. To move beyond that I think the logbook is needed e.g. present levels as "higher than you've ever paddled it" type thing
The Stanley/Hobek book for California got around this by giving the difficulty at each flow range…   100-400 cfs Class IV, 400-1000 class IV-V, 1000-2000  Class V etc.    I think the challenge is that each region has different thoughts on what class III, IV, IV+, IV-V, V and V+ is.  I think defining benchmarks in each region could be useful here.  To drive consistency.

## 8.3 Language problems

My italian, french, etc. is not strong enough… I would participate in translations if there were ways…

*TL:  This is a personal priority.  I am experimenting with some ideas for multi-lingual support for Rivermap Hinweise.*
*FB: Also a pretty high priority in the RiverApp. Especially for Italy and Czech Republic.*
*AM: Translating is real challenge. I'd recommend just to introduce dimesions (stars by category) and convert all mult-lang descriptions into it.*
*MA: I would go for danger symbols + I would still keep a text area, which could be translated automatically*
I would also consider having a layout that is friendly to tools like GoogleTranslate.  Some sites are not very user friendly once translated.  Too many links within write-ups that all have to be translated to get the picture.  Or subpages that getting a unique address for can pose a challenge.  We will never be able to translate to every language, nor will everyone speak one language…  so making it tool friendly for translation should be an important consideration.

## 8.4 Infos not centralized

Sometimes i report to rivermap & riverApp, leave out ckfiumi for lang. barrier & tediousness…
Broader systems could increase participation.

*TL:  Not really.  But we could make more effort to share the participation that we have.*

*FB: I think that could be great for informing about a danger. people entered it one time and it's available everywhere. For River sections it's very different. A section description cannot be written "neutral" from the authors. It's from one side painful to check 2-3 websites or book to have some information about a river but also great because you can read a lot of different point of views (different authors) and make your own summarise. At the end the information you get is "richer".*

*MA: It is a really big issue to my eyes and I would love to talk about it. What we do is not sustainable. Local experts have to provide calibration informations to the different systems 2-3 times… And editors are spending their time collecting informations from users. Once the editors have the values, they don't have time to share them with all the websites. I was doing it with EVO at the beginning but it is not feasible anymore for me from a time point of view. It would be much better to have one and only datasheet for data, where everybody could take the last data given by local experts. Same issue when there is an accident, the information should be shared among the community which is not really easy with all those different websites. It is time and energy consuming for people who want to report something.*

## 8.5 Double work being done

Everyone stores their own info about data sources, writes parsers, collects user data like corrections, notes, new stretches.
I hesitate to contribute, If I know it is all inefficient.

*FB: yes hard parsers could be partially be one and the result could be used by everyone via a simple API. We are also working successfully this way with pegelalarm.at. But you have to be sure the "partner" is delivering a well working API. With eauxvives.org it was not working well and I the end I wrote my own parsers for the french rivers. I took me more time to write an e-mail and wait for the fix than fixing directly a parser…*

*TL:  We had some problems with the reliability of data feeds from other projects.  Eventually we have written all our own parsers.*

(RT) This is an interesting problem -- the service implications of directly depending on a potentially unreliable API are worrying. The answer in my opinion would be to work towards agreeing a catonical data respresentation for the keys data pieces (river sections, guage mapping and updates). If this was the case sharing info in this shared data format between systems would be much easier, but it does need to be a batch load format so it can be loaded then persisted locally by the receiving system removing most active service problems. "Writing all our own parsers" would be trivial if everyone presented data in the same format for one off or regular bacth load, or indeed where this wasn't done a single shared parser implementation could convert to that format.

# 8.6 Fragile projects: sustainability?

There are incredibly powerful projects, but power coming only from one person, what happens if they are gone, loose interest?

*TL: Then you will still have the other projects. This is an advantage of double work being done.*

(RT) +1. Double work is often good for robustness.

- I never saw a license statement, like open data access, code access…
  UPDATE: rainchasers.com has it!
  *TL: We are discussing this internally. It will be an issue if we agree to share information.*
  *FB: It's a good point….*
  *TL: The more I think about this the more I think that we need to share data/resources to enable new projects and initiatives to start. As we have probably mentioned elsewhere the issues are:*
  *- we will need permissive licenses.*
  *- we will need some abstract organisation.*
  *- we will need some technical architecture and implementation.*
  *- there will be harmonization problems (for example mapping section ids, gauge ids, and that is just the very tip of the iceberg).*

  *But the main problem is that all the projects will feel defensive about a loss of autonomy and a risk of being superceeded. These are tricky waters to navigate.*

(RT) agreement on best licence would be good. I'd also be interested to see more code open sourcing to be honest, e.g. https://github.com/rainchasers/

## 8.6.1 Project-end of life: Lost user-input

There are probably sites who are functional replacements to the dying project, but what about the user input like river descriptions.

Usually the first reason for a system to stop work is because of server-software stopping to work, as software-updates trigger followup- work.

One relatively easy solution is to regularly do some kind of export to some static format like pdf, or static html pages.

A more complex thing is to migrate the content into a new project. Besides all technical hurdles, there are also questions around licensing: Is the project allowed to forward the user-input to some other project? Did contributors gree to some kind of terms/license? If not, do legal restrictions apply, or does the absence of terms mean the data was given unconditionally?

## 8.7 Support: Where are the federations?

Most projects seem private initiatives, where are local, national, international federations, clubs chiming in? They could give money, official backup for approaching data-sources, etc…

RiverApp has connections with some state-federations.

*FB: Yes the BKV (Bavaria) wanted to build a simple page on their website with river level, information about navigability, legal information (season where paddling is allowed)... They asked me to provide the real time information and the river sections and some other complicated stuffs. I invested some hours to build an API and delivered it after 2 weeks.After that they needed to build an HTML table on their website but they do not manage to do that and the project seems to be postponed because nobody has time there. I invested 8 hours of work on my free time for nothing. In my opinion (France + Germany) most of the budget of the federations are for competition sport (Slalom...etc)*

*TL: There is an initiative proposed to SKV to create as FaKo for river running.*

*MA: Like Florian, I think we should not expect much time and money from our federations. We might try to understand how we could bring an added value to them. We need to involve people doing competitions and ask them where their needs are. But if all the tools (Rivermap, River app, EVO, CKFiumi…) could work together efficiently we would probably save some time in the future. I have the feeling that we are all more or less doing the same things. If we could share the work, that would be much more efficient.*

*[NF] Regarding the 3 questions above:*
*I feel that the urge at this point is to separate data from code/hosting, and free (open-source) at least the data.*
*That would allow:*
*  for contributors:*
*    \* centralizing. I contribute once, any interested project fetch (automatically) data*
*    \* "secure" data. No worry about contributing to a project which may die, burrying my data*

*  for developers/projects:*
*    \* no need to look for contributors anymore. I'm sure that's very important, isn't it?*
*    \* thus, projects can take the way they want, make free choices*

*  for data:*
*    \* being a "common good", that every kayaker can enjoy*

*I think quite the same things apply to code: that's what free software is about and that works well for decentralized, small communities. We can imagine interesting evolutions, driven by individuals or clubs/federations. But OK, one thing at a time.*
*I began to talk to ML about a free licence for RM data, and just quited researches about*

*that... I can work seriously on that point (with my limited abilities, I'm not a specialist of Law-related stuff :) and hopefully propose things before the beginning of August, if you agree that is an interesting evolution.*

What if eg. AKC would sponsor not only expeditions but also hackers?
*FB: YES great idea*

# 9 Current discussions

Places i have found where people discuss about possibilities to improve on our tools.
Do you know other discussions?

Discussion about improving Rivermap
https://www.facebook.com/groups/302510333157209/permalink/1531302466944650/
(There are constant improvements being discussed in the FB group, but this thread has sparked particularly many answers)
Another thread:
https://m.facebook.com/groups/302510333157209/permalink/996712183737017/


Discussion about improving CKFIUMI
https://forum.ckfiumi.net/index.php/topic,5725.msg21873.html#msg21873

Discussion about improving eauxvives.org
http://www.eauxvives.org/forum/viewtopic.php?p=319015#p319015


# 10 How to create awareness

How can awareness be created? To get help solving issues, but also to find out how many paddlers are wishing for better tools (without knowing it).


## 10.1 Keep talking

I just keep talking to everyone about it, and every then and now a new Idea pops up.


## 10.2 POSSIBLE SOLUTION

MR: I'm a programmer and I have though a possible server structure that could serve any kind of app or similar:
**If:**

- all the current applications agree to put the data in one place and retrieve them from one central server
- some one could sponsorize this project with some money 4000-8000€

**we could**:
create a central website to insert all info about rivers, levels, gauges, rain, description etc..
Any editor with access can add data to this database.  Unvalidated data can be collected from users as well to show unvalidated statistic (es: for min and max flow)
Give to all app around the world the free access to all data in multilanguage.

**Benefit:** It's not necessary to create front end application (there are many around) .
It's going to be easy to create an app to publish this data.
The info are collected in one place creating the most complete database of rivers and similar.
Data will be collected with a standard data protocol that include any possible data about rivers.
App creator will have a easy work since all the data are easily accessible without any work!
App can send editors to add data in the central database.
Automatic and manual translations can be possible.
**Problems**: a central validator (money needed) need to work to add gauges and update parsers for make gauge data available and validate editors and create accounts.

# 10.3 Present @paddle-expo

Organize a Presentation on paddle expo, to get publicity, find new interested parties.
*FB: Going to paddle Expo and presenting the project to kayak manufacturer / brands would be awesome. The prices are unfortunately very high  and I have to be very sure I get some sponsors there ;-) Idea: maybe we can do something together*
*TR: Bobby who suggested this did not think of a payed booth, but do a 10minutes presentation at the industry dinner event, where they present things like gear-award, balkan rivers project etc. I have good connections with the organizer Horst, i guess this would be totally possible if we want, and "just" need the work.*
*MA: very good idea but we need to have a common discussion before presenting. First it would be good to involve local platforms like EVO and CKFiumi. We need to define the objective of the presentation. What do we want to show? What are the next steps? etc etc*

I have mailed with Horst, and he confirmed we can have a talk at the "Industry Party" that takes place Wednesday, 20. September 2017 after the show, so around 20:00 h

## 10.4 Write in Magazines

Write about it in Kayak Session
> *FB: yes, I really need to write them an email.*
> *TR: here i'm also thinking of presenting the big picture, like outlined here…*
> *I think that could be the way to reach American Paddling-IT*
> *MA: What about writing an article after the Paddle Expo presentation?*

TR: Good Idea!

# 11 How to get Funding

How could money be found to support work on all these new ideas, and also to run them?

- Sponsoring/Advertizing
- Federations, clubs
- Cooperation with government-initiatives? Swiss ANU has forecasting for certain gauges, there could be interested to share knowledge? Get us access to some new data?

- VL: The French Canoe Federation (FFCK) is open to the idea of funding such an app/website (several k€), under certain conditions. Example of possible conditions:
  - Delivery of an actual, working version of the application/website
  - Possibility for the FFCK to get usage metrics (useful to report the amount of kayaking activity to the French Sport ministry, driving FFCK funding)
  - Exclusive access to the App on the French territory to FFCK Licence holders?
  - Or expanded access and services to FFCK Licence holders?
  - Integration / Branding of the French version of the tool ?

# 12 The Logbook Idea

Besides publicly using (anonymized) loogbook data for guidebook-stuff,
I also want it as personal memory and for reference on my future paddling.
I wish to remember when i paddled where with whom, how hard and how good it was, etc.
Currently i keep my runs in a Spreadsheet, if i don't forget to do it.
But my phone could easily guess if i paddled a stretch, create a log entry and ask me to confirm/correct, add data like rating, co-paddlers etc.
This could be stored as a private log, but also (maybe optionally) shared.

Shared data could lead to gauge-infos for rivers without gauges, and, more importantly in my view, runnability / quality infos.

*FB: yes, it's on the roadmap. A lot of users already asked for that. It's a lot of work because I have to create a user login / account system to be sure the users cannot loose the data if they lose or change their phone or deinstall the App.*

*TL: We have the same concern. Also, I have a motivational issue. We try to collect information contributions that are passed back to the community as soon as possible. The community payoff for such a logbook application is less immediate (at best).*
RE:Tim, i think the community payoff could be huge, by using logbook-data...

# 13 Non-Digital Guide Ideas

Besides the existing online guides, what about using online Data (mainly also from logbooks) in paper-guides? eg. updating the DKV books…
DKV could be interested to get data to update their guidebooks.

SKV (Swiss Canoe Federation) has actually started to work with rivermap.ch to bring out a new Version of the printed Swiss Whitewater Map:
https://www.kanuschule.ch/blog/201712/hilf-mit-der-neuen-gewaesserkarte

LG : Selling of paper-guides could possibly finance the server ?

# 14 Gauge Ideas

## 14.1 Use historic data

Some gauges do not give live data, only historic, eg. Once a month data of the past month… that could still be taken to show a probability of current levels. One step further, (historic) weather-data could be used too…
*TL: Maybe, but I am doubtful. Give me an example.*
*TR: For some gauges in Graubünden i think it would be possible to get monthly batches of data.*
*Such data could be used in follow up years for probability of good levels. Taking in weather data (temperature, rainfall) might add up to the relevancy of such statistical data.*
*Stefan Messmer has all the data since the start of the SKV-Pegel, that could be a start dataset.*
*(Using statistical Data from Logbooks below would lead to similar / add up to the same data.)*
*MA: It would be interesting to do statistics over a 10 years period in order to see where to go and when (for example, Portugal in February, Corsica in April, Pyrénées in May, Hautes-Alpes in June etc etc). But it looks like a PhD subject and I have no clue if it is feasible from a data point of view. This would be very interesting for kayak clubs, especially because they usually plan their trips much before we do it as*

*individuals. They very often have a calendar already defined at the beginning of the year. If the clubs are interested, then the federations could be interested...*

*TL:  Marie-Laure's idea is possible: we have sections and calibrations, and the authorities would probably provide historic data free for such a purpose.  It would be a standalone project for anyone interested enough to do it.*

## 14.2 Use weather data

add rain-radar overlay to rivermap?

*TL:  We would do this immediately if someone pays for the overlay images.*

MA: I would also add an "how much has it rained in the last 12 hours" function

*TL: We have done something on this now (Aug '17)*

use weather forecast for a prognosis of waterlevels

*TL:  This is the business of professionals.   Better is to get the prognosis from the authorities.  BAFU publishes some water level forecast data for limited locations. - we have discussed integrating these into Rivermap.  Baden-Württemberg publish forecasts, but only in graphical form.*

*TR: Thinking big, i could imagine that cooperation with pro's is possible. Eg. With funding. Eg. with joining interests with SLRG and rescue- organizations (Bobby Frieser, working @ SLRG, suggested such things.)*
*Also, i could imagine a less detailed service, like something that reacts on "N cm of rain within M days forecasted for Jura creates an alert to look out for possible good Levels… could also depend on data of what rain-amounts created what levels.*

*FB: I think we should not try to do it ourself. It's a lot of work and agency will do it better anyway. We should try to get access to their data ;-)*

## 14.3 Use data from Logbooks

If we had data like runners, bikers etc. do have through apps like Strava, it could be derived from there, if a stretch is having a good flow:
Just by the fact that there are many reports coming in of ppl. running X on level Y. If there was user-input like star-rating or more refined input, it would improve further.

*TL:  We have thought about this for a couple of years.  Someone is going to have to do quite a bit of work before they find out whether the participation levels (and quality) are sufficient to produce meaningful information.*
*TR: I envision entry-barrier to participation would be as low as installing an app, and most data-collection would happen without user-interaction.*
*The added incentive besides the already existing features would be to get a logbook, which i find very appealing…*
*About participation: Isn't it already happening with the corsica levels?*

*@Florian, how many active installs does RiverApp have? Play store says 50k-100k installs…*
*currently 92 000 downloads and 4000 unique users every day.*

***MA: Gauge ideas: Visual (height) gauges feedbacks (Lattenpegel)***
*Lattenpegel (visual height feedbacks) are already used successfully in Corsica and on the Guil. They could be used in France on classical runs like the Vénéon, the Souloise, the Limony etc etc… People keep asking the levels on Facebook all the time to know if those rivers are running… Why not encouraging them to participate even more than now?*

**(LG) Create a paddler-hacker association**
I think that having an association bringing together the contributors of the various existing sites will bring us several advantages:
- proof of seriousness to discuss with the federations and possible sponsors.
- the possibility of using this structure to organize a party or other event whose profits will be used to finance the server and the communication.
- Ensure that the finances raised are managed in a democratic manner and without any unjustified profit.

In France there is a law of 1901 which regulates the creation of non-profit associations. I do not know the laws of other countries but there must be the same thing.


# 15 Motivation: Why?

Why are people doing these projects?

To be able to do something together, it's important to understand the different reasons why people do what they do….
Based on that, possible collaboration has to make sure it adds value for the people behind the different projects.

I use the Drupal Open Source CMS, and there i see how much effort is being put into ways so people contributing to the project can get rewards. There, they used to only mention people who contributed code, but started to expand the system, so that also web-agencies donating manpower, and clients of theirs can get mentions, and therefore reputation. Besides contributing code, it's also possible to get mentioned if you work on documentation and other stuff…


## 15.1 toro

Why am i "moaning" about "i wish there was improvement here, there, etc."?

- I miss some features, mainly the logbook-thing, so i could remember my own level-judgement. (pleaso someone fix this for me ;-) )
- I miss easy access to waterlevel-judgement from my peers:
  I want to know which waterlevel on river X is recommended by my peers, not the static guidebook-rating, which may be too high / too low for me.
- I don't like to contribute to projects that i see are inefficient (same contribution to multiple projects)
- I just have these ideas filling up my head, but i can't program well enough, don't have much time, and think it would be ineffecient to start another isolated thing.

I have no commercial interest in any existing, or in proposed projects. I think it is legitimate, even good, if people have commercial interests. To keep a project running long-term, i think it's needed to have a broader base, eg. database open to everyone.

## 15.2 RiverApp (florian bessiere)

toro thinks he heard from flo: He thought it would be nice to have levels in an app, and people liked it, now it's also a showcase for his professional skills.

## 15.3 Whitewater Guide (Mike Krutyansky)

*MK: I travel for kayaking almost 360 days a year and I paddle a lot in the areas that I've never been to. I've been using all kinds of guidebooks and sites and I'm not happy with all of them because they give only part of the information but sometimes very important information. The problem of most of the online projects is that they lack descriptions and other information that is so important when you go paddling. Also many of them are only about local rivers and in local languages (4-paddlers, eauxvives, ckfiumi etc)*
*This kind of information if often in paper guidebooks but c'mon who wants to buy expensive outdated paper guides.*
*So we decided to put everything together but of course it needs resources. Currently Konstantin Kuznetcov is doing all the work and he needs help.*
*I don't think all proper descriptions can be obtained just by enthusiasts. It takes around 2-4 hours to add 1 section properly with all neccessary info. So we want to come out with a crowdfunding campaign, try to attract investors and possibly introduce paid (chtap) regions and share this money with authors.*
*We want to cooperate with all existing projects and together find funding.*

## 15.4 rivermap.ch

Mischa started with an experiment with maps and data-mashup, and people liked it...

*TL: Google changed some things and Mischa's map stopped working. I wanted to use the map so I decided to help fix it. Then there were some other things that I wanted, so I did them too.*

*MA: I started to use Rivermap heavily during a kayak trip that I was organizing with my Kayak Club. We had planned to stay in the Vorderrhein area but there was not enough water. Thanks to Rivermap I could see that there was water in Engadine and move all my group there. I am now a Rivermap project member and I like this tool which allows me to see where to go paddling in just one mouse click. I also like to see the section put in and put out on the map.*

# 16 Notes from talking to different People

## 16.1 Nick Troutman & Emily Jackson

"talk to James McBeath about worldkayak"
jmcbeath@jacksonkayak.com
Emily@jacksonkayak.com

## 16.2 Charlie Walbridge

The AWA accident DB maintainer tells me to talk to Kevin Colburn

## 16.3 Tomaso Dentone

Of exo kayak mentioned about the
Italian Federation: Daniele Molmenti is responsible for non-competition

## 16.4 Stephane Pion

"ask Tony Estanguet about FFCK"

## 16.5 Michi Neumann

- If you have Logbook data, you could use Heatmaps to show where people go for paddling…
- https://pagaja.de/ is a page that promotes paddling in an optically appealing way, this is what the sport needs more of!

# 17 Possible brainstorming- or Project- Contributors

Paddlers with IT-Connections (besides of the known-suspects = those active on projects), that i want to poke about this:

Flavio (Ckfiumi)
Vincent Richard (eauxvives founder)
Pierre Unglas, Laurent Guyot (Team EVO (eauxvives)

Rok Sribar (California)
Vincent Lecrubier (FFCK)