# EDI Metadata Template (2019)[[1]](#footnote-1)

Data should be in csv text file. If starting with an Excel spreadsheet, please make sure it does not contain any formulas and comments on cells. If you need comments put them in their own column. If data were used in a database and major table linking is necessary to analyze, please de-normalize into a flat file, not just database table exports.

## Dataset Title

(be descriptive, more than 5 words):

LTREB Clark Fork Monitoring Sites Running Nutrients WY 2017

## Short name or nickname you use to refer to this dataset:

LTREB\_Nutrients\_WY2017

## Abstract

(include what, why, where, when, and how)

The LTREB monitoring project is a portion of the 200 million-dollar superfund project for ecological restoration of the Clark Fork River, associated tributaries, and head water streams including Silver Bow and Warm Springs Creek. Restoration along the Clark Fork River includes removal of metal-laden floodplain soils, lowering of the floodplain to its original elevation, and re-vegetation of over 70 km of the river's floodplain closest to contaminant sources. The LTREB monitoring project consists of bi-weekly water quality monitoring across a 200-km restoration gradient contaminated by historic mining practices to monitor inorganic phosphorus and nitrogen concentrations, biotic standing stocks, and heavy metal contamination. The LTREB monitoring project is conducted within the first 200km of the Clark Fork River and associated tributaries located in Western Montana. This LTREB monitoring program began in 2017 and will be competed in the year 2022 with potential for funding extension. Surface water samples are collected from thirteen sites within the upper Clark Fork River. Water samples are collected at each monitoring site in triplicate and filtered with a 0.7 µm glass fiber filter. Nutrient samples are analyzed using a flow injection analyzer (AP2) for nitrate (NO3N), soluble reactive phosphorus (SRP), and ammonium (NH4N) concentrations reported in mg/L.

## Investigators

(list in order as for a paper with e-mail addresses, organization and preferably ORCID ID, if you don’t have one, get it, it’s easy and free: <http://orcid.org/>) add table rows as needed

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| First Name | Middle Initial | Last Name | Organization | e-mail address | ORCID ID (optional) |
| Herbert | M | Valett | University of Montana | maury.valett@mso.umt.edu | 0000-0001-7146-6420 |
| Juliana |  | D’Andrilli | Louisiana Universities Marine Consortium | [jdandrilli@lumcon.edu](mailto:jdandrilli@lumcon.edu) | 0000-0002-3352-2564 |
| Robert |  | Payn | Montana State University | [rpayn@montana.edu](mailto:rpayn@montana.edu) | N/A |
| Michael |  | DeGrandpre | University of Montana | michael.degrandpre@mso.umt.edu | 0000-0003-1969-6709 |
| Marc |  | Peipoch | Stroud Water Research Center | mpeipoch@stroudcenter.org | 0000-0002-5943-831X |

## Other personnel names and roles

(dataset creators & contact, field crew, data entry etc. with e-mail addresses, organization and ORCID ID)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| First Name | Middle Initial | Last Name | Organization | e-mail address | ORCID ID (optional) | Role in project |
| Claire | R | Utzman | University of Montana | [claire.utzman@mso.umt.edu](mailto:claire.utzman@mso.umt.edu) | 0000-0002-3228-8470 | Technician  Data Manager |
| Rafael | Feijo | Lima | University of Montana | rafael.feijo@mso.umt.edu | 0000-0001-8514-2195 | Post Doc |
| Taylor | Gold | Quiros | University of Montana | [taylor.goldquiros@umconnect.umt.edu](mailto:taylor.goldquiros@umconnect.umt.edu) | 0000-0003-3721-6027 | Ph.D. candidate |
| Fischer |  | Young | University of Montana | fischer.young@umconnect.umt.edu | 0000-0003-4439-2483 | Ph.D. candidate |

## License

(Select a license for release of your data. We have 2 recommendations: [CCO – most accommodating of data reuse](https://creativecommons.org/publicdomain/zero/1.0/), & [CCBY – requires attribution](https://creativecommons.org/licenses/by/4.0/))

Will decide after discussion with project PI. Data set is currently not licensable as figures, manuscripts, and code have not been created for this dataset.

## Keywords

(List keywords and separate with commas. Using keywords from a controlled vocabulary (CV) will improve the future discovery and reuse of your data. The LTER CV is effective at describing ecological and environmental data. [Access the LTER CV here](http://vocab.lternet.edu/vocab/vocab/index.php). [Try this text mining service to extract LTER CV keywords from your abstract or methods](http://vocab.lternet.edu/keywordDistiller/). Additionally, please determine one or two keywords that best describe your lab, station, and/or project (e.g., Trout Lake Station, NTL LTER). This will help others discover your data by site/project).

Dissolved nutrients, filtered, concentrations, long term monitoring, water chemistry, water quality.

## Funding of this work:

Add rows to table if several grants were involved, list only the main PI, start with main grant first:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| PI First Name | PI Middle Initial | PI Last Name | PI ORCID ID (optional) | Title of Grant | Funding Agency | Funding Identification Number |
| Herbert | M | Valett | 0000-0001-7146-6420 | LTREB: Collaborative Research - River ecosystem responses to floodplain restoration | National Science Foundation | 1655197 |
| Ragan |  | Callaway | 0000-0001-7342-4312 | Consortium for Research on Environmental Water Systems (CREWS) | NSF EPSCoR RII Track-1 | OIA- 1757351 |

## Timeframe

* Begin date: August 15, 2017
* End date: September 28, 2017

## Geographic location

* Verbal description: 200km of the Upper Clark Fork river beginning at the headwaters formed by Warm Springs Creek and Silverbow Creek to the end of the study site which is Missoula, MT above the input of the Rattlesnake Creek tributary. This geographic range includes the territory surrounding the three measured tributaries in this study including the Little Blackfoot, Flint Creek, and Rock Creek as well as the main stem.
* North bounding coordinates (decimals): 46°11'13.28"N112°46'12.40"W
* South bounding coordinates (decimals): 46°52'2.78"N113°58'59.22"W
* East bounding coordinates (decimals): 46°37'43.74"N113° 9'3.94"W
* West bounding coordinates (decimals): 46°31'10.21"N112°47'36.29"W

## Taxonomic species or groups

N/A

## Methods

(please be specific, include instrument descriptions, or point to a protocol online, if this is a data compilation please specify datasets used, preferably their DOI or URL plus general citation information)

See directory UCFR LTREB 2017-2022 🡪 Administration 🡪 SOPs🡪 Field Protocols and Scheduling🡪02\_protocol🡪 LTREB monitoring SOP

## Data Table

* Column name: exactly as it appears in the dataset. Please avoid special characters, dashes and spaces.
* Description: please be specific, it can be lengthy
* Unit: please avoid special characters and describe units in this pattern: e.g. microSiemenPerCentimeter, microgramsPerLiter, absoptionPerMolePerCentimeter
* Code explanation: if you use codes in your column, please explain in this way: e.g. LR=Little Rock Lake, A=Sample suspect, J=Nonstandard routine followed
* Data format: please tell us exactly how the date and time is formatted: e.g. mm/dd/yyyy hh:mm:ss plus the time zone and whether or not daylight savings was observed.
* If a code for ‘no data’ is used, please specify: e.g. -99999

Please add rows as needed

**Table description:** Add a description for each table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Column name | Peak # | Position | Identifier | Type | Raw Ht | Cor Ht | mg/L |
| Description | Sample absorbance readings create peaks | Location in sample rack | Sample identification: SYNC-largest standard, C1-C6 Calibrant, W-wash, sample number | Sample type: calibrant, sync peak, wash, sample unknown | Raw peak heights from absorbance readings | Baseline corrected heights from absorbance readings | Concentration of analyte- created from raw and corrected peak heights based on absorbance readings |
| Unit | Numerical 1-200 | 1:1-1:60,  2:1-2:60,  3:1-3:60 | Alphabetical | Description | Numerical 4 decimal points | Numerical 4 decimal points | milligramsPerLiter |
| Code Explanation | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Data Format | 1,2,3 ext. | 1:1-1:60,  2:1-2:60,  3:1-3:60 | SYNC, W, C1-C6, CC1, CC2, | SYNC, W, C1-C6, Unknown=water samples | 0.0012 | 0.0000 | 0.003 |
| Empty Value Entry | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

## Articles

(List articles citing this dataset)

|  |  |  |
| --- | --- | --- |
| Article DOI or URL (DOI is preferred) | Article title | Journal title |
| N/A | **N/A** | **N/A** |

## No published articles citing this data.

## Scripts/code (software)

(List any software scripts/code you would like to archive along with your data. These may include processing scripts you wrote to create, clean, or analyze the data.)

|  |  |  |
| --- | --- | --- |
| File name | Description | Scripting language |
| N/A | **N/A** | **N/A** |

## Data provenance

(Were these data derived from other data? If so, you will want to document this information so users know where these data come from.)

|  |  |  |  |
| --- | --- | --- | --- |
| Dataset title | Dataset DOI or URL | Creator (name & email) | Contact (name & email) |
| N/A | **N/A** | **N/A** | **N/A** |

## Notes and Comments

File content: UCFR LTREB Nutrient Data\_Metadata

File name schema:<Project>\_<Analyte>\_<Machine>\_<Start Date YYYY\_MM\_DD>\_<End Date YYYY\_MM\_DD>\_<File Type>

Schema key: Project: LTREB

Site ID: Site location number

Date: Date of sample collection

Time: Time of sample collection-Mountain Standard Time

File Type: Data product (DP), metadata, readme file, results, sample, process, final.

Example file name: LTREB\_NO3\_AP2\_2017\_08\_15\_2017\_09\_28\_FINAL

1. This document liberally borrows from similar documents at SBC and GCE [↑](#footnote-ref-1)