

# MHL Automated Data Acquisition Service

## ***1 Introduction***

The MHL Automated Data Acquisition Service (MADAS) is a system allowing users to access time series data. Please read the conditions outlined in section 5 for terms of usage.

You can interact with MADAS using two mechanisms.

**1) Web browser** : Using your web browser you can login to the service and navigate to data you wish to download. Please note you need to use a web browser with cookies enabled.

**2) JSON (JavaScript Object Notation) REST** : A RESTful application is available for system-to-system data interchanging. See : <http://www.w3schools.com/json/> for more information.

## ***2 Restrictions***

- 1) You must register as member before you can access the system. MHL Reserves the right to deny membership or services to any member or visitor to the MHL web site. MHL keeps any user data in an encrypted format. You will not be contacted by MHL for the purposes of advertising or marketing.
- 2) There is a daily limit to the number of requests you may make in the system. Please contact MHL if you wish this limit to be revised.
- 3) There is a limit to the period of data downloadable in a single request. By default this is set to 90 days. Please contact MHL if you wish this limit to be revised.

## 3 Requesting Data Web

### 3.1 Login

You can login to the system via :

<http://new.mhl.nsw.gov.au/services/mhladas/>

## MHL Automated Data Acquisition Service



This system is for authorised use By Manly Hydraulics Laboratory users.  
UNAUTHORISED USE OF THIS SYSTEM MAY BE A CRIMINAL OFFENCE.

1. While the data provided is public information, it is provided in this format expressly for the use of your company in the nominated project. The data must not be used subsequently for any other purpose, nor used for commercial benefit, without first obtaining written permission from NSW Public Work's Manly Hydraulics Laboratory (MHL) for the intended use.

2. The NSW Office of Environment and Heritage and MHL accept no responsibility for the accuracy of advice generated based on the data, nor for any subsequent analysis or presentation of the data by you or your company.

3. The data is Crown copyright in the right of NSW. Use and presentation of the data on all occasions must include an acknowledgment to the NSW Office of Environment and Heritage as owner of the data and to MHL for the collection and provision of the data.

Check to accepts terms :

Username

Password

### 3.2 Station List

Once you have logged in you are able to browse a list of stations available to you:

## MHL Automated Data Acquisition Service



Welcome N.Quirey@mhladas.com

You may now access the MHL Data Aquisition System.

[»» List Stations](#)

**MHL Automated Data Acquisition Service**  
**N.Quirey@mhladas.com station list**



Station	Long Name	Number	Latitude	Longitude	Coverage
-					
Allambie Heights (Live)	Allambie Heights at Owen Stanley Avenue	566152	-33.7580	151.2533	20 Jun 1999 12:00 - 09 May 2013 23:00
Blackmans Parade Downstream (Live)	American Creek at Blackmans Parade Downstream	214431	-34.4545	150.8341	11 Oct 2001 15:30 - 10 May 2013 01:45
Blackmans Parade Upstream (Live)	American Creek at Blackmans Parade Upstream	214430	-34.4545	150.8339	28 Oct 2003 15:00 - 10 May 2013 01:45
Avalon Rain (Live)	Avalon at Avalon Golf Course	566145	-33.6391	151.3299	31 May 1994 19:00 - 10 May 2013 02:00
Avoca Lagoon (Live)	Avoca Lagoon at Avoca Lagoon	212452	-33.4632	151.4295	24 Jun 1993 15:15 - 10 May 2013 09:00
Back Lagoon (Live)	Back Lagoon at Back Lagoon	219415	-36.8836	149.9157	27 Feb 2009 00:00 - 10 May 2013 09:15

**3.3 Station Data**

Click on a station entry row to view meta data, parameters measured at that station and the data coverage available.

**MHL Automated Data Acquisition Service**  
**N.Quirey@mhladas.com station data**



**Brunswick Heads (Live)**

Your daily access limit is : 50 downloads.  
 You have currently used 2 of 50 downloads.

**Long Name** Brunswick River at Brunswick Heads  
**Number** 202403 **Datum** Brunswick River Flood Mitigation Datum  
**Location** -28.53681111111111 / 153.55211  
**Coverage** 01 Jul 2010 00:15 to 16 May 2013 12:00

	Parameter	Choose start date	Choose end date	Output format	
Parameters	Level 1	2013-05-10	From  2013-05-17	To  CSV	<a href="#">Get Data</a>
	Level 2	2013-05-10	From  2013-05-17	To  CSV	<a href="#">Get Data</a>

**Message** This data has been collected under the NSW Coastal Data Network Program managed by Office of Environment and Heritage (OEH).

**3.4 Get Time Series data**

Use the calendar icons to select a start and end data for data request query. Please note that restrictions apply to the amount of data you can access in a single request. Please contact MHL if you have any questions about this. You can choose from the following output formats :

- CSV** : a comma delimited file is produced for download
- HTML** : a table of data is returned to your web browser. This is suitable for selecting, cutting and pasting into another document
- JSON** : Java Script Object Notation. This is intended for automated system to system transfer

## 4 Requesting Data using JSON over HTTP POST

You can get a list of functions and their descriptions via :

<http://new.mhl.nsw.gov.au/services/mhladas/getFunctionList.json.php>

This will list the functions available to you, required parameters and a description of usage.

### 4.1 Login – Request access key

You need to make a login request to begin using the service. This login provides you with a limited time access key. You need to provide this key for any subsequent requests you make.

`http://new.mhl.nsw.gov.au/services/mhladas/getAccessKey.json.php`

#### Request

```
{"username":"user@myserver.com","password":"abc123"}
```

#### Example response

```
{"access_key":" MjAxMy0wNS0x...","error":null}
```

### 4.2 Get Station List

Use this function to list the stations you have available to you.

`http://new.mhl.nsw.gov.au/services/mhladas/getStationList.json.php`

#### Request

```
{"username":"test@mhl.nsw.gov.au","access_key": " MjAxMy0wNS0x..."}
```

#### Example response

```
{
  "stations": [
    {
      "long_name": "Avoca Lagoon at Avoca Lagoon",
      "name": "Avoca Lagoon (Live)",
      "station_number": "212452",
      "latitude": "-33.46326944444445",
      "longitude": "151.42956111111111",
      "minRecord": "24 Jun 1993 15:15",
      "maxRecord": "10 May 2013 09:00"
    },
    {
      "long_name": "Back Lagoon at Back Lagoon",
      "name": "Back Lagoon (Live)",
      "station_number": "219415",
      "latitude": "-36.883619444444444",
      "longitude": "149.91576944444444",
      "minRecord": "27 Feb 2009 00:00",
      "maxRecord": "10 May 2013 09:15"
    },
    ...
  ],
  "error": null
}
```

### 4.3 Get Station

Provides meta data for a given station. Use the 'station\_number' field from list Station list function.

<http://new.mhl.nsw.gov.au/services/mhladas/getStation.json.php>

#### Request

```
{"username":"test@mhl.nsw.gov.au","access_key": " MjAxMy0wNS0x...",  
"station_number": "212453"}
```

#### Example response

```
{  
  "station": [  
    {  
      "long_name": "Brunswick River at Brunswick Heads",  
      "name": "Brunswick Heads (Live)",  
      "station_number": "202403",  
      "latitude": "-28.536811111111111",  
      "longitude": "153.55211",  
      "minRecord": "01 Jul 2010 00:15",  
      "maxRecord": "16 May 2013 12:00",  
      "channels": [  
        {  
          "name": "Level 1",  
          "tsid": "89432042"  
        },  
        {  
          "name": "Level 2",  
          "tsid": "89078042"  
        }  
      ],  
      "datum": "Brunswick River Flood Mitigation Datum",  
      "message": "This data has been collected under the NSW Coastal  
Data Network Program managed by Office of Environment and Heritage."  
    }  
  ],  
  "error": null  
}
```

### 4.4 Get Data

Request time series data for a given parameter. The tsID must be a valid identifier as provided in the getStation function. Dates are required to be provided in the format YYYY-mm-dd.

Use the 'format' for data return formats. Valid values are : json, text, csv, html

#### Request

```
{"username":"test@mhl.nsw.gov.au","access_key": "MjAxMy0wNS0x...",  
"tsID": "51935042", "startdate0": "2013-05-01", "enddate0": "2013-05-  
13", "param": "0", "format": "text"}
```

#### Example response

```
{  
  "data": {  
    "station_name": null,  
    "station_number": null,  
    "startdate": "2013-05-01",  
    "enddate": "2013-05-13",  
    "data": {  
      "2013-05-01 00:00:00": 1.848,  

```

"2013-05-01 00:15:00": 1.868,  
"2013-05-01 00:30:00": 1.842,  
...

## **5 Conditions**

Please note that the data is supplied subject to the following conditions:

1. While the data provided is public information, it is provided in this format expressly for the use of your company in the nominated project. The data must not be used subsequently for any other purpose, nor used for commercial benefit, without first obtaining written permission from NSW Public Work's Manly Hydraulics Laboratory (MHL) for the intended use.
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