## 水资源承载力评价统计功能

向用户提供针对多年评价结果的统计功能，并结合地图表示。统计包含三方面。

## 水资源承载力（行政区）【李慧】

参数：water\_body\_id,begin\_year,end\_year

统计用户指定年度范围内选定的行政区的评价结果，不超载/超载/临界超载次数及所占百分比；

1. 2010-2019年期间统计结果表

|  |  |  |  |
| --- | --- | --- | --- |
| 次数/百分比  行政区 | 超载 | 不超载 | 临界超载 |
| 辽阳市 | 2/20% | 7/70% | 1/10% |
| …… |  |  |  |

1. 统计结果柱状图

横坐标以行政区为单位，分超载/不超载/临界超载3项内容，纵坐标表示次数/百分比。

方法名：getXZQResultChart

参数 1）water\_body\_id:928FE3EF219048C5BFEF749785476164

2）begin\_year:2010

3）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"行政区ID"**:**"E7F041104A954C5094D4A04F1FF69A8A"**,  
                **"行政区划名称"**:**"本溪市"**,  
                **"经纬度坐标"**:**"123.752153967143,41.3099353652545"**,  
                **"SUPER\_OBJ\_ID"**:**"210500"**,  
                **"超载次数"**:**1**,  
                **"超载百分比"**:**"50.00%"**,  
                **"不超载次数"**:**1**,  
                **"不超载百分比"**:**"50.00%"**,  
                **"临界超载次数"**:**0**,  
                **"临界超载百分比"**:**"0.00%"**  
            },  
            {  
                **"行政区ID"**:**"DCD1D48669BE44B699C6FA6230B5101D"**,  
                **"行政区划名称"**:**"抚顺市"**,  
                **"经纬度坐标"**:**"124.43821953405,41.3761084026189"**,  
                **"SUPER\_OBJ\_ID"**:**"210400"**,  
                **"超载次数"**:**1**,  
                **"超载百分比"**:**"100.00%"**,  
                **"不超载次数"**:**0**,  
                **"不超载百分比"**:**"0.00%"**,  
                **"临界超载次数"**:**0**,  
                **"临界超载百分比"**:**"0.00%"**  
            },  
            {  
                **"行政区ID"**:**"A5E9A4AC34BA4317A5377B901B4C93D6"**,  
                **"行政区划名称"**:**"辽阳市"**,  
                **"经纬度坐标"**:**"122.708898108333,41.1798272862501"**,  
                **"SUPER\_OBJ\_ID"**:**"211000"**,  
                **"超载次数"**:**1**,  
                **"超载百分比"**:**"50.00%"**,  
                **"不超载次数"**:**1**,  
                **"不超载百分比"**:**"50.00%"**,  
                **"临界超载次数"**:**0**,  
                **"临界超载百分比"**:**"0.00%"**  
            }  
        ]  
    }  
}

## 污染物入河量 【李慧】

比较用户指定年度范围内选定的水功能区/河段/行政区具体数值，并可统计河段/行政区内达标/超标次数及所占百分比。

1. 统计结果表格

* 表1 2010-2019年间入河量数值表

|  |  |  |  |
| --- | --- | --- | --- |
| 年度  尺度 | 2010 | …… | 2019 |
| 水功能区/河段/行政区 |  |  |  |
| …… |  |  |  |

1. 行政区

方法名：getXZQPollutionQuantity

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）begin\_year:2010

（3）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"行政区ID"**:**"E7F041104A954C5094D4A04F1FF69A8A"**,  
                **"行政区划名称"**:**"本溪市"**,  
                **"经纬度坐标"**:**"123.752153967143,41.3099353652545"**,  
                **"SUPER\_OBJ\_ID"**:**"210500"**,  
                **"行政区年间入河量"**:[  
                    {  
                        **"year"**:**"2010"**,  
                        **"化学需氧量"**:**55**,  
                        **"氨氮"**:**66**  
                    },  
                    {  
                        **"year"**:**"2011"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2012"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2013"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2014"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2015"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2016"**,  
                        **"化学需氧量"**:**37.2224**,  
                        **"氨氮"**:**49.44**  
                    },  
                    {  
                        **"year"**:**"2017"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2018"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2019"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    }  
                ]  
            },  
            {  
                **"行政区ID"**:**"DCD1D48669BE44B699C6FA6230B5101D"**,  
                **"行政区划名称"**:**"抚顺市"**,  
                **"经纬度坐标"**:**"124.43821953405,41.3761084026189"**,  
                **"SUPER\_OBJ\_ID"**:**"210400"**,  
                **"行政区年间入河量"**:[  
                    {  
                        **"year"**:**"2010"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2011"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2012"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2013"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2014"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2015"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2016"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2017"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2018"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2019"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    }  
                ]  
            },  
            {  
                **"行政区ID"**:**"A5E9A4AC34BA4317A5377B901B4C93D6"**,  
                **"行政区划名称"**:**"辽阳市"**,  
                **"经纬度坐标"**:**"122.708898108333,41.1798272862501"**,  
                **"SUPER\_OBJ\_ID"**:**"211000"**,  
                **"行政区年间入河量"**:[  
                    {  
                        **"year"**:**"2010"**,  
                        **"化学需氧量"**:**52**,  
                        **"氨氮"**:**73**  
                    },  
                    {  
                        **"year"**:**"2011"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2012"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2013"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2014"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2015"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2016"**,  
                        **"化学需氧量"**:**23**,  
                        **"氨氮"**:**34**  
                    },  
                    {  
                        **"year"**:**"2017"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2018"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2019"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    }  
                ]  
            },  
            {  
                **"行政区ID"**:**"F4639DDB199F4D13A9D12BD59B3ED637"**,  
                **"行政区划名称"**:**"鞍山市"**,  
                **"经纬度坐标"**:**"122.546987979448,41.0235762059728"**,  
                **"SUPER\_OBJ\_ID"**:**"210300"**,  
                **"行政区年间入河量"**:[  
                    {  
                        **"year"**:**"2010"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2011"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2012"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2013"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2014"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2015"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2016"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2017"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2018"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    },  
                    {  
                        **"year"**:**"2019"**,  
                        **"化学需氧量"**:**""**,  
                        **"氨氮"**:**""**  
                    }  
                ]  
            }  
        ]  
    }  
}

二、行政区下面的河段

方法名：getRiverPollutionQuantity

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）xzqid:A5E9A4AC34BA4317A5377B901B4C93D6

（3）begin\_year:2010

（4）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"水体ID"**:**"4d47b795ba42480db11488bffdf03b57"**,  
                **"水体名称"**:**"汤河西支"**,  
                **"经纬度坐标"**:**null**,  
                **"SUPER\_OBJ\_ID"**:**null**,  
                **"河段年间入河量"**:[  
                    {  
                        **"year"**:**"2010"**,  
                        **"COD"**:**52**,  
                        **"NH"**:**73**  
                    },  
                    {  
                        **"year"**:**"2011"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2012"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
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                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2014"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2015"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2016"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2017"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2018"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2019"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    }  
                ]  
            },  
            {  
                **"水体ID"**:**"680286B75C3D45FE9767C288DA5E583D"**,  
                **"水体名称"**:**"汤河"**,  
                **"经纬度坐标"**:**"123.302806939254,40.9974721084549"**,  
                **"SUPER\_OBJ\_ID"**:**"ABA27606"**,  
                **"河段年间入河量"**:[  
                    {  
                        **"year"**:**"2010"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2011"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2012"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2013"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
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                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2015"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2016"**,  
                        **"COD"**:**23**,  
                        **"NH"**:**34**  
                    },  
                    {  
                        **"year"**:**"2017"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2018"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2019"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    }  
                ]  
            }  
        ]  
    }  
}

1. 河段下面的水功能区

方法名：getWaterFounctionPollutionQuantity

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）xzqid:A5E9A4AC34BA4317A5377B901B4C93D6

（3）riverID:680286B75C3D45FE9767C288DA5E583D

（4）begin\_year:2010

（5）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"水功能区ID"**:**"E2E99CCA226747AC8E7CEDB199C41A25"**,  
                **"水功能区名称"**:**"汤河二道河水文站饮用水源区"**,  
                **"经纬度坐标"**:**"123.391883,41.020859"**,  
                **"SUPER\_OBJ\_ID"**:**"B0402002003011"**,  
                **"水功能区年间入河量"**:[  
                    {  
                        **"year"**:**"2010"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2011"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2012"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2013"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2014"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2015"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2016"**,  
                        **"COD"**:**23**,  
                        **"NH"**:**34**  
                    },  
                    {  
                        **"year"**:**"2017"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2018"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    },  
                    {  
                        **"year"**:**"2019"**,  
                        **"COD"**:**""**,  
                        **"NH"**:**""**  
                    }  
                ]  
            }  
        ]  
    }  
}

* 表2 2010-2019年间入河量超标统计表

|  |  |  |
| --- | --- | --- |
| 次数/百分比  统计尺度 | 超标 | 不超标 |
| 河段/行政区 | 2/20% | 8/80% |
| …… |  |  |

一、行政区

方法名：getXZQPollutionExcessive

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）begin\_year:2010

（3）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"行政区\_ID"**:**"E7F041104A954C5094D4A04F1FF69A8A"**,  
                **"行政区划名称"**:**"本溪市"**,  
                **"经纬度坐标"**:**"123.752153967143,41.3099353652545"**,  
                **"SUPER\_OBJ\_ID"**:**"210500"**,  
                **"超标次数"**:**0**,  
                **"超标百分比"**:**"0.00%"**,  
                **"不超标次数"**:**5**,  
                **"不超标百分比"**:**"100.00%"**  
            },  
            {  
                **"行政区\_ID"**:**"A5E9A4AC34BA4317A5377B901B4C93D6"**,  
                **"行政区划名称"**:**"辽阳市"**,  
                **"经纬度坐标"**:**"122.708898108333,41.1798272862501"**,  
                **"SUPER\_OBJ\_ID"**:**"211000"**,  
                **"超标次数"**:**0**,  
                **"超标百分比"**:**"0.00%"**,  
                **"不超标次数"**:**5**,  
                **"不超标百分比"**:**"100.00%"**  
            }  
        ]  
    }  
}

1. 河段

方法名：getRiverPollutionExcessive

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）xzqid:A5E9A4AC34BA4317A5377B901B4C93D6

（3）begin\_year:2010

（4）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"水体\_ID"**:**"4d47b795ba42480db11488bffdf03b57"**,  
                **"水体名称"**:**"汤河西支"**,  
                **"经纬度坐标"**:**null**,  
                **"SUPER\_OBJ\_ID"**:**null**,  
                **"超标次数"**:**0**,  
                **"超标百分比"**:**"0.00%"**,  
                **"不超标次数"**:**1**,  
                **"不超标百分比"**:**"100.00%"**  
            },  
            {  
                **"水体\_ID"**:**"680286B75C3D45FE9767C288DA5E583D"**,  
                **"水体名称"**:**"汤河"**,  
                **"经纬度坐标"**:**"123.302806939254,40.9974721084549"**,  
                **"SUPER\_OBJ\_ID"**:**"ABA27606"**,  
                **"超标次数"**:**0**,  
                **"超标百分比"**:**"0.00%"**,  
                **"不超标次数"**:**4**,  
                **"不超标百分比"**:**"100.00%"**  
            }  
        ]  
    }  
}

1. 统计结果图

* 图1：2010-2019年间入河量数值柱状图

横坐标为统计尺度（水功能区/河段/行政区），一年为一组，纵坐标为数值。

* 图2：2010-2019年间入河量统计柱状图

横坐标为统计尺度（河段/行政区），一年为一组，分超标/不超标两项内容，纵坐标为次数/百分比。

## 水质达标率【李慧】

比较用户指定年度范围内选定的河段/行政区水质达标次数百分比/长度百分比的具体数值，并可统计河段/行政区内水质达标率达标/超标次数及所占百分比。

1. 统计结果表格

* 表1 2010-2019年间水质达标率数值表

|  |  |  |  |
| --- | --- | --- | --- |
| 年度  尺度 | 2010 | …… | 2019 |
| 河段/行政区 | 次数百分比/长度百分比 |  |  |
| …… |  |  |  |

（一）行政区

方法名：getXZQWaterRate

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）begin\_year:2010

（3）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"行政区ID"**:**"E7F041104A954C5094D4A04F1FF69A8A"**,  
                **"行政区划名称"**:**"本溪市"**,  
                **"经纬度坐标"**:**"123.752153967143,41.3099353652545"**,  
                **"SUPER\_OBJ\_ID"**:**"210500"**,  
                **"年间行政区水质达标率"**:[  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2010"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2011"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2012"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2013"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2014"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2015"**  
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                    {  
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                        **"长度达标率"**:**"100.00%"**,  
                        **"year"**:**"2016"**  
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                    {  
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                        **"长度达标率"**:**"0.00%"**,  
                        **"year"**:**"2017"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2018"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2019"**  
                    }  
                ]  
            },  
            {  
                **"行政区ID"**:**"DCD1D48669BE44B699C6FA6230B5101D"**,  
                **"行政区划名称"**:**"抚顺市"**,  
                **"经纬度坐标"**:**"124.43821953405,41.3761084026189"**,  
                **"SUPER\_OBJ\_ID"**:**"210400"**,  
                **"年间行政区水质达标率"**:[  
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                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
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                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2011"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2012"**  
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                    {  
                        **"个数达标率"**:**""**,  
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                        **"year"**:**"2013"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2014"**  
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                    {  
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                        **"长度达标率"**:**"0.00%"**,  
                        **"year"**:**"2017"**  
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                    {  
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                        **"year"**:**"2018"**  
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                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2019"**  
                    }  
                ]  
            },  
            {  
                **"行政区ID"**:**"A5E9A4AC34BA4317A5377B901B4C93D6"**,  
                **"行政区划名称"**:**"辽阳市"**,  
                **"经纬度坐标"**:**"122.708898108333,41.1798272862501"**,  
                **"SUPER\_OBJ\_ID"**:**"211000"**,  
                **"年间行政区水质达标率"**:[  
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                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2011"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2012"**  
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                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2013"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2014"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2015"**  
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                        **"个数达标率"**:**"0.00%"**,  
                        **"长度达标率"**:**"0.00%"**,  
                        **"year"**:**"2016"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2017"**  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2018"**  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2019"**  
                    }  
                ]  
            },  
            {  
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                **"行政区划名称"**:**"鞍山市"**,  
                **"经纬度坐标"**:**"122.546987979448,41.0235762059728"**,  
                **"SUPER\_OBJ\_ID"**:**"210300"**,  
                **"年间行政区水质达标率"**:[  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2011"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2012"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2013"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2014"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2015"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2016"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2017"**  
                    },  
                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2018"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2019"**  
                    }  
                ]  
            }  
        ]  
    }  
}

（二）河段

方法名：getRiverWaterRate

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）xzqid:A5E9A4AC34BA4317A5377B901B4C93D6

（3）begin\_year:2010

（4）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"水体ID"**:**"4d47b795ba42480db11488bffdf03b57"**,  
                **"水体名称"**:**"汤河西支"**,  
                **"经纬度坐标"**:**null**,  
                **"SUPER\_OBJ\_ID"**:**null**,  
                **"年间河段水质达标率"**:[  
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                        **"个数达标率"**:**"100.00%"**,  
                        **"长度达标率"**:**"100.00%"**,  
                        **"year"**:**"2010"**  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2011"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2012"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2013"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2014"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2015"**  
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                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2016"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2017"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2018"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2019"**  
                    }  
                ]  
            },  
            {  
                **"水体ID"**:**"680286B75C3D45FE9767C288DA5E583D"**,  
                **"水体名称"**:**"汤河"**,  
                **"经纬度坐标"**:**"123.302806939254,40.9974721084549"**,  
                **"SUPER\_OBJ\_ID"**:**"ABA27606"**,  
                **"年间河段水质达标率"**:[  
                    {  
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                        **"长度达标率"**:**"100.00%"**,  
                        **"year"**:**"2010"**  
                    },  
                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2011"**  
                    },  
                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2012"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2013"**  
                    },  
                    {  
                        **"个数达标率"**:**""**,  
                        **"长度达标率"**:**""**,  
                        **"year"**:**"2014"**  
                    },  
                    {  
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                        **"长度达标率"**:**""**,  
                        **"year"**:**"2015"**  
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                        **"year"**:**"2016"**  
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                        **"year"**:**"2017"**  
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                    {  
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                        **"year"**:**"2019"**  
                    }  
                ]  
            }  
        ]  
    }  
}

* 表2 2010-2019年间水质达标率超标（与最严格水质达标率相比的超标）统计表

|  |  |  |
| --- | --- | --- |
| 次数/百分比  统计尺度 | 超标 | 不超标 |
| 河段/行政区 | 2/20% | 8/80% |
| …… |  |  |

1. 统计结果图

* 图1：2010-2019年间水质达标率数值柱状图

横坐标为统计尺度（河段/行政区），一年为一组，内容为长度和次数两个百分比，纵坐标为数值。

* 图2：2010-2019年间入河量统计柱状图

横坐标为统计尺度（河段/行政区），一年为一组，分超标/不超标两项内容，纵坐标为次数/百分比。

1. 行政区

方法名：getXZQWaterRateExcessive

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）begin\_year:2010

（3）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"行政区\_ID"**:**"E7F041104A954C5094D4A04F1FF69A8A"**,  
                **"行政区划名称"**:**"本溪市"**,  
                **"经纬度坐标"**:**"123.752153967143,41.3099353652545"**,  
                **"SUPER\_OBJ\_ID"**:**"210500"**,  
                **"超标次数"**:**1**,  
                **"超标百分比"**:**"50.00%"**,  
                **"不超标次数"**:**1**,  
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                **"行政区划名称"**:**"抚顺市"**,  
                **"经纬度坐标"**:**"124.43821953405,41.3761084026189"**,  
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                **"行政区\_ID"**:**"A5E9A4AC34BA4317A5377B901B4C93D6"**,  
                **"行政区划名称"**:**"辽阳市"**,  
                **"经纬度坐标"**:**"122.708898108333,41.1798272862501"**,  
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    }  
}

1. 河段

方法名：getRiverWaterRateExcessive

参数：

（1）water\_body\_id:928FE3EF219048C5BFEF749785476164

（2）xzqid:A5E9A4AC34BA4317A5377B901B4C93D6

（3）begin\_year:2010

（4）end\_year:2019

返回：

{  
    **"success"**:true,  
    **"message"**:**null**,  
    **"title"**:**null**,  
    **"attributes"**:{  
        **"targetList"**:[  
            {  
                **"水体ID"**:**"4d47b795ba42480db11488bffdf03b57"**,  
                **"水体名称"**:**"汤河西支"**,  
                **"经纬度坐标"**:**null**,  
                **"SUPER\_OBJ\_ID"**:**null**,  
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                **"水体名称"**:**"汤河"**,  
                **"经纬度坐标"**:**"123.302806939254,40.9974721084549"**,  
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