2
2
3
4
6
6
8
10
11
13
13
15
16
16
17
19
19
20
20
22
27
29
30
31

34.38m 6000m^3

170m 2014

±0.3mm

1.62L/min

6.21mm 4.91mm

501.94L/min 382.17L/min

0.5mm

74.27mm 58.82mm

2003 6 2014

105324 7.5 t

22 1981 6 2003

6 2.1 t 3.6

1840.00m 185.00m

81m 104.00m 2014

1.0mm

19.65mm 25.40mm

2.69mm 9.11mm -0.54mm 0.29mm

92.83mm

212.56mm

70m

2625.0L/min

1717.9 L/min

2014 12

2014 6 9

6 9

1 2 6

7

8 2.4

1.5 - -

4 - 1 9

6

1 2-1

2014 4380 m^3

4510 m^3 1877 1990 2.9

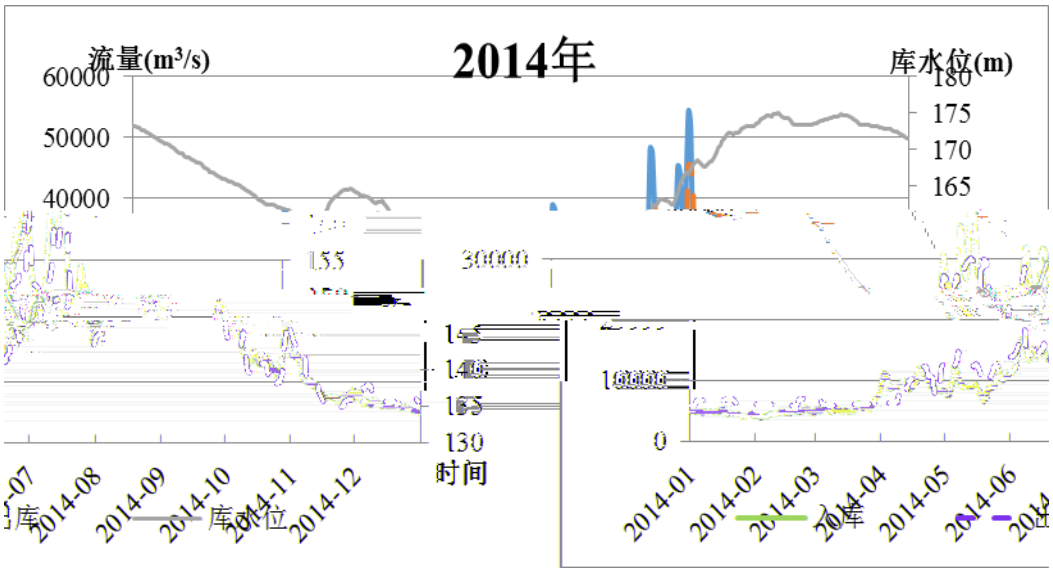
3960 m^3 2003 2013 10.6%

2014

1 4 9 12 5 8 6 9

55000m^3/s 9

20 2-2


2014年
流量(m³/s)
库水位(m)
60000
50000
40000
180
175
170
165
155
130
300000
0
时间
2014-07
2014-08
2014-09
2014-10
2014-11
2014-12
2014-01
2014-02
2014-03
2014-04
2014-05
2014-06

2014 17.1 17.2

0.1 39.9 2014 7 30

-2.5 2014 2 14 967.5mm

1136.2mm 1-2 23.7 / 9

2014 7 31 5 81

6 15 7 11 8 5 9 1

2013 11 11 14 175m

2013

11 26 0 174.71m

2014 6 10 8 146.06m

1

2013 11 26 0 243.5 m^3

180 1570m^3/s 39.03m

2

2014 2 4450m^3/s 6000m^3/s 166.4m 2m 2m

2 21 7000m^3/s

3 4 6000m^3/s

11 7060m^3/s 10 m^3

3

2014 5 14 18 6 4

20 5 30

7

õ 7 12 Ŵ

25000m³/s 7 19 18

97

22 6 18

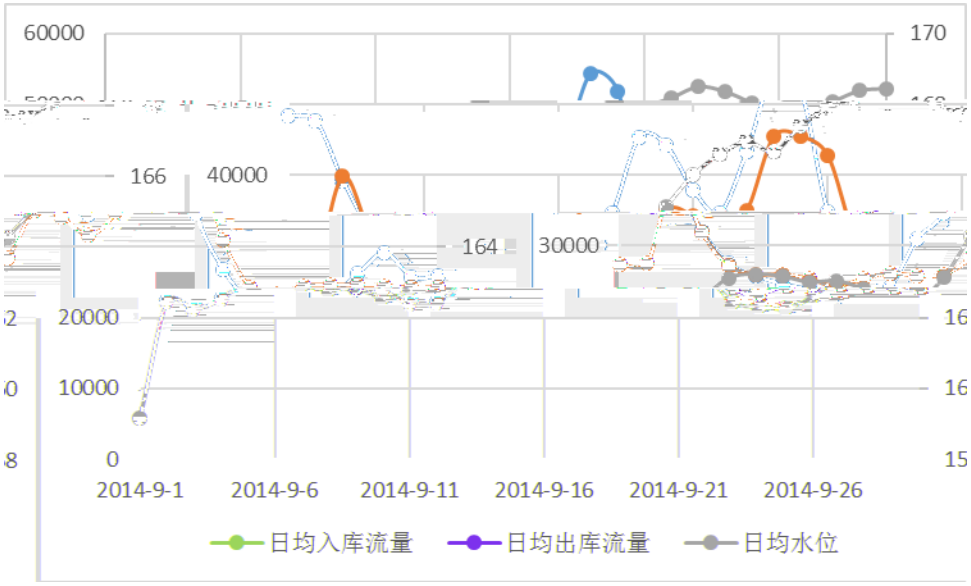
25000m³/s

30000m³/s 116

2014 9 10 9 10

31000m³/s 9 3.95m

33.73 m³ 9 2-2



2 10

10 9 168.58m

6.42m 62.07 m³ 10

174.5m

25000m³/s 10 30 2

10 31 10

175m 16100m³/s

13900m³/s

2014

4394.79h

8088.28h 94.25%

5258.1h 8408.24h

95.98%

2014 7 14 34 8

25 2250 kW 2250 kW

703.72h 34 974.17h

2000 kW 1113.12h

2014

53 1592.28h

0

1

100%

2013 ~2014 30

D 8 C 17 B 3

2 4

61 29

2014 ~2015 2

C D 24 143

183

2014

2014

2014 kWh 4.31 m³

5.47% 51.1 kWh 988.19

kWh

8108 kWh 2.69 t

2014 10794

4.4 52 10898 t

6137 t

1225 t

, 80%

2014 16023 t

3604t 10898

0.68 2013

2013 0.60

		5407	5387	10794
		22357	22101	44458
		264257	256777	521034
		510074	510396	1020470
		61374072	47606076	108980148
		80750000	79480000	160230000
		376317	353292	729609

2014 97.08% 84.1%

71.0%

		12	11
		90.21	74.15
		8	11
		44.40	48.36
		1	1

2014

PLC

70m

1 2

500 -

40000 m^3/s 45000m^3/s

2030 1.1

2014

2014

5-1

		2010 8		132 m^3 COD GB18918-2002 B COD 70.95% 80.51%	
		1997		1200t	

2014

2014

185m

2014

20 m^2

5.1.3.1

2014

5.1.3.2

2014

1320

285

5.1.3.3

2014

4200

3500 83.3% 16.6%

2014

V

GB3838-2002

GB5749-2006

GB3095-1996

46.5%

51.4%

45.1% 53.5%

2014

GB3096-2008 2

4a 3

2003 2013

1.96 t 1.86 t

62% 2014 0.554 t

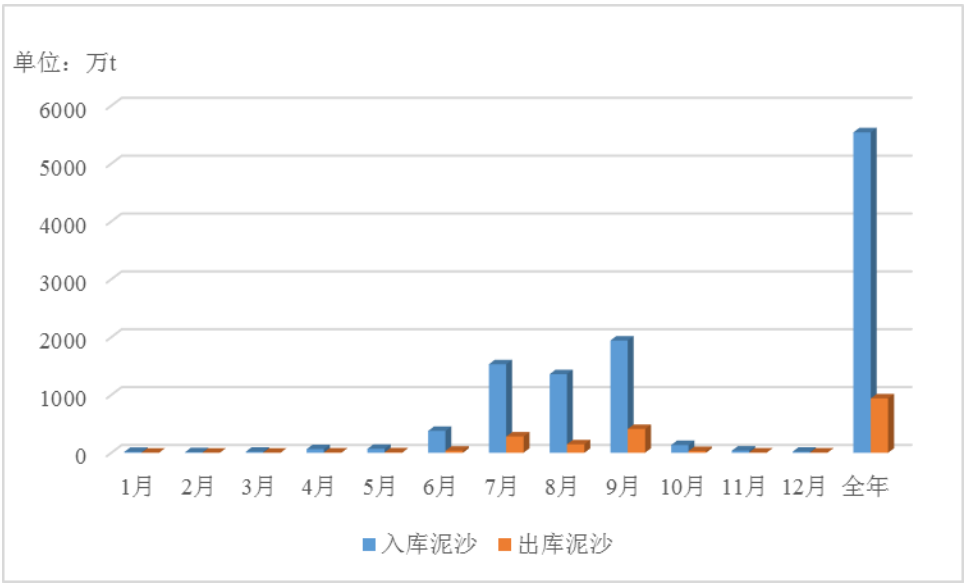
1956 2014 86%

12km

2014 0.105 t

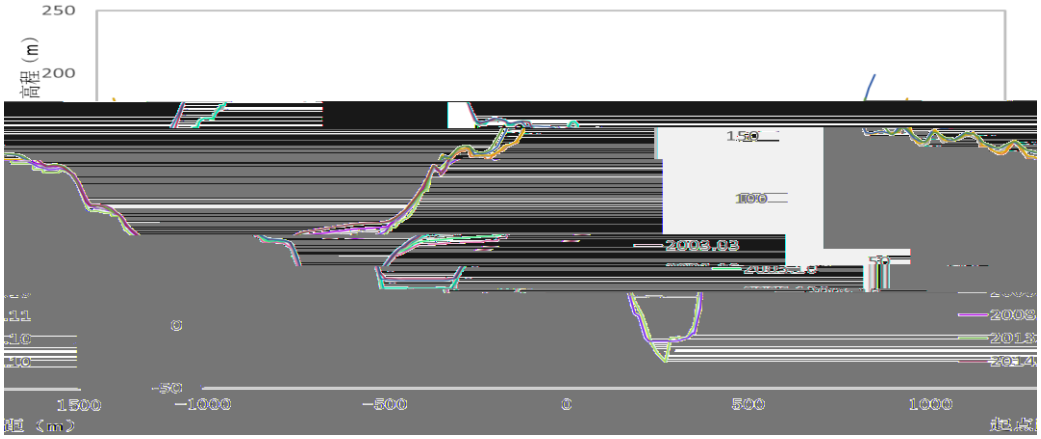
2014 0.094 t 2014

5-1

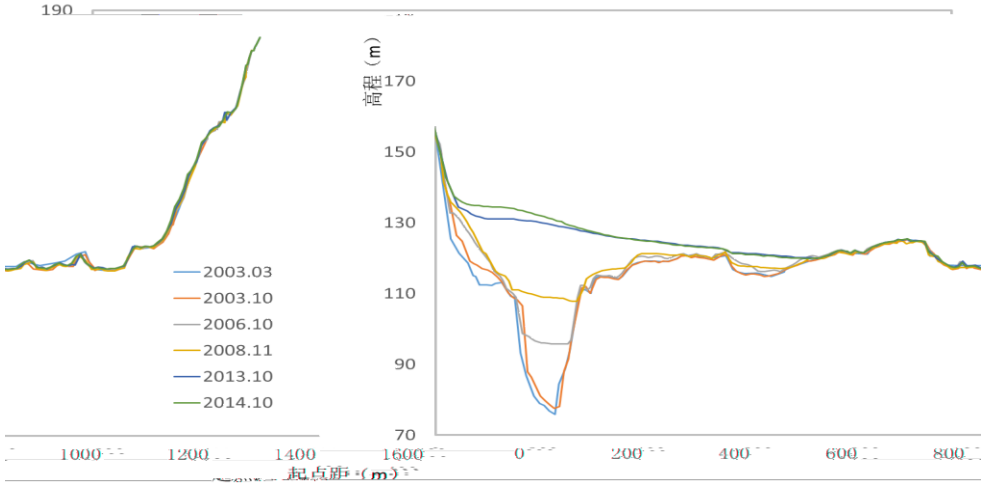


2003 6 2014 12 15.759 t 1.31 t 40% 24.4% 2014 0.449 t 19.0% 2014 5-2

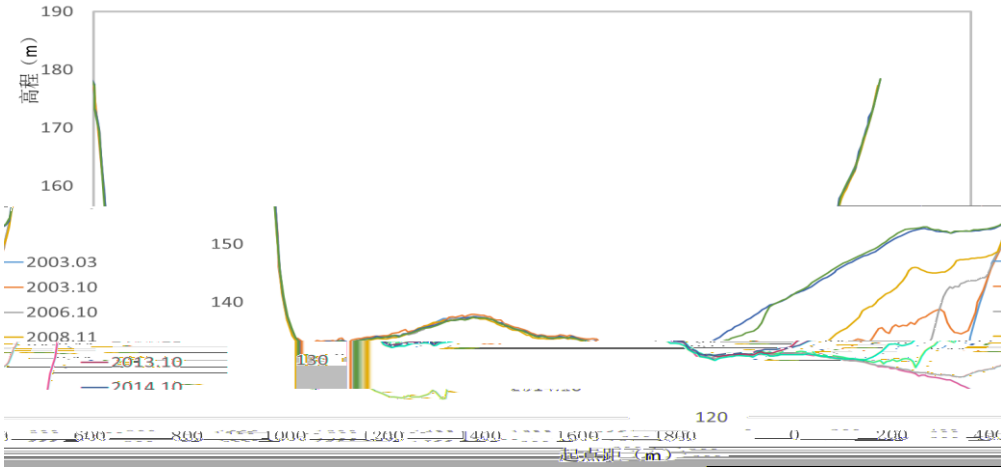
2003 3 2014 10 5-3



(a) S34 5.6km



(b) S207 360.4km



(c) 458.5km S253

175m

60km

2003 5 ~2014 12

1454.6 m^3

2003 3 2014 10

15.1km 175m

1.604 m^3 33.6m 64.6m

108m

2014

56%

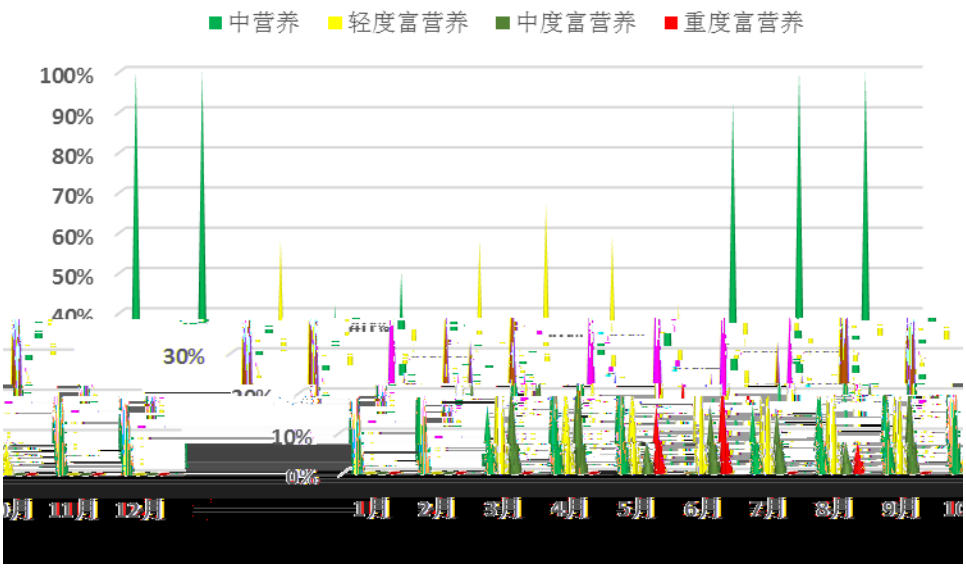
2014

2014	0.0%	56%	28%	11%	4%

2014 3 10

8% 100% 6

5-4 1 2 11 12



1

2014 5 4

4 -5 7 -9

- 5 -

6 -7 - 8 -

2

2014

- - -

2014

1

B

2

4

0.47

0.54

3 4 13 “

”

2014

2000

18

9 4 13

5 9

1984

2014 56

	(1cm 5cm)	(10cm 35cm)	(1)		
1984 1990	1476000	8500	347		1484847
1991 1995	1350000	34000	10	16	1384026
1996 2000	1410000	154100	110	14	1564224
2001 2005		183612	1000	2	184614
2006 2010		385413	758	3	386174
2011 2012		1110	1058		2168
2013		5000	3034		8034
2014			2000		2000
	4236000	771735	6317	35	5016087

2014

9.8 m^3

2014 1 1 0 2014 12 31 24

M0

1207 M0-0.9 1002 M1-1.9 188

M2-2.9 12 M3-3.9 3 M4-4.9 2

4.5

2015 3 27 30 5 26

M3.0

M4.2 M4.5 M3.4

+ +

- VII

2014 2014 3 30 4.5