

# Report on the Irrigation Satisfaction Survey Season 2015-16

December 2016

## **I. BACKGROUND**

In August 2016 the Minister for Primary Industries and Water wrote to over 2,500 water users seeking their feedback on their experiences during the 2015-16 irrigation season (Attachment I). The survey was circulated to not only irrigators who hold water licences but also to those who source water from alternative supplies<sup>1</sup>. The Department obtained mailing lists from most water entities. One entity, the Lawrenny Water Trust declined to participate given that no members of the Trust have individual rights and access to secure irrigation water was not considered to be an issue. TasWater and the Cressy Longford Irrigation Scheme (CLIS) distributed the survey directly to their users on the basis of privacy issues. TasWater forwarded any responses back to the Department and CLIS irrigators responded directly to the Department.

The survey questions were developed by Tasmanian Irrigation and the Department of Primary Industries, Parks, Water and Environment and sought responses to the following:

1. Region of the State.
2. Irrigation water used between October 2015 and April 2016.
3. Source of supply.
4. Awareness of the Extreme Dry Conditions Policy.
5. Assistance to farming businesses of the Extreme Dry Conditions Policy.
6. Restrictions to supply of irrigation water during October 2015 and April 2016.
7. Satisfaction with service and support supplied by the relevant water provider.
8. An opportunity to make further comments were also provided.

The survey commenced on 30 August 2016 and closed on 8 October 2016. A total of 571 responses were received with 21 completed online and the rest submitted as hardcopies that were manually entered into Survey Monkey by Departmental staff.

Both TasWater and the Elizabeth Macquarie Irrigation Trust (EMIT) indicated that they would like to get feedback/access to the aggregated survey results when these are compiled. EMIT suggested the results may be helpful in assessing service provision and providing some insight into what they may do better in future. The results will also be considered as part of a holistic review of the 2015-16 irrigation season that the Minister for Primary Industries and Water has requested be undertaken.

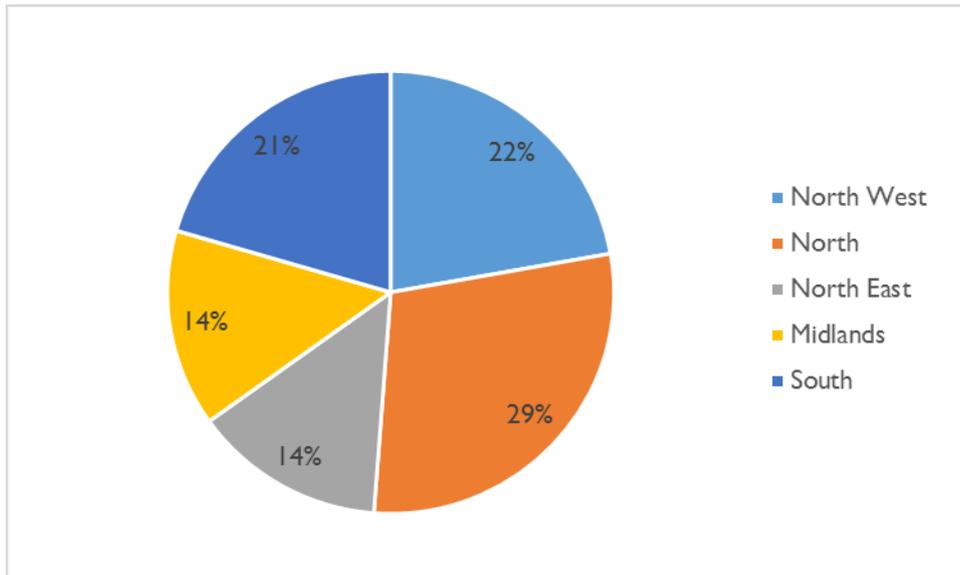
## **2. RESULTS**

***Question 1- Please circle your catchment area on the map or name your catchment.***

Figure 1 shows how the respondents to this survey were distributed across the State, with the largest proportion located in the North. The detailed analysis of the results show that some people may have incorrectly reported which region they are located. For example one respondent said they were in the South but were supplied by water from the Cressy Longford Scheme. Nevertheless, the results indicate that responses to the survey covered all parts of the State and in total 571 responses were received.

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<sup>1</sup> This includes water managed by schemes run by Tasmanian Irrigation, Elizabeth Macquarie Irrigation Trust, Cressy Longford Irrigation Scheme Ltd, the Forthside Irrigation Water Trust, Nowhere Else/Whitehawk Creek Irrigation Water Trust, the Richmond Irrigation Water Trust, the River Clyde Trust as well as irrigation water supplied by TasWater.



**Figure 1.** Respondent location.

**Question 2- For the period October 2015 to April 2016 in total, approximately how many ML of irrigation water did you utilise?**

Question 2 was included to gain an understanding of the total volume of irrigation water utilised in the State last season. Given that only 571 out of 2,500 surveys were returned, the data for this question does not provide a full picture of irrigation usage in the State for the 2015-16 irrigation season.

Question 2 was left blank by 31 respondents and a further 20 survey responses were unsure of their exact usage and did not provide an estimate. The volume of water utilised for irrigation from 521 survey responses totalled 143,746 ML. Of that amount, 90 of the 521 valid responses to Question 2 indicated that their usage for the 2015-16 irrigation season was zero. Table 1 summarises the water usage information by region provided by the survey respondents.

**Table 1.** Water usage reported by Region (based on 521 valid responses to the survey).

Region	Irrigation water usage reported by survey respondents (ML)	Proportion of reported usage
North West	15,069	10%
North	53,119	37%
North East	17,587	12%
Midlands	43,480	30%
South	11,416	8%
Region not stated	3,075	2%
<b>TOTAL</b>	<b>143,746</b>	

Based on water usage information from the Australian Bureau of Statistics, in the five years from 2010-11 until 2014-15, the average consumption by the agricultural sector in Tasmania was 219,300ML<sup>2</sup>. Notwithstanding that this does not include data for 2015-16, the volumetric data

<sup>2</sup> See <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4610.02014-15?OpenDocument>.

provided for the 2015-16 Irrigation Satisfaction Survey most likely accounts for a relatively large proportion of water use during that period (it represents 66% of the annual average consumption for the previous five year period).

### **Question 3- Who supplies your irrigation water?**

Question 3 enabled survey respondents to indicate who supplies them with water. The suppliers listed included: DPIPWE, Tasmanian Irrigation, Hydro (transfers), EMIT, CLIS, TasWater. An 'other' category was also listed, and many respondents provided the details of the 'other' supplier which was included in the Survey Monkey results and included for example other smaller irrigation schemes, on-farm storage or bores.

In a number of cases, respondents indicated that irrigation water was supplied not from just one source. For example, water may be accessed under an irrigation right supplied by TI or another water entity such as CLIS or EMIT. The same person may also be accessing water through arrangements with TasWater or a transfer from Hydro Tasmania. A number of respondents hold water licences under the *Water Management Act 1999*. Some stated they had water supplied from on-farm storages - in such cases it was not clear whether or not the water is taken from watercourses under another authorisation (e.g. water licence or irrigation right) or was a catchment dam with a Part 5 right under the *Water Management Act 1999*. Table 2 shows the survey responses and how many sources of supply were listed by individuals. "No response" means that the question was left blank.

**Table 2.** Number of supply sources for water by Region.

<b>Region</b>	<b>Number of sources of supply</b>	<b>Number of water users providing a response</b>
North West	1	88
	2	12
	No response	23
North	1	107
	2	27
	3	4
	No response	23
North East	1	48
	2	16
	3	3
	No response	10
Midlands	1	49
	2	18
	3	3
	4	1
	No response	9
South	1	83
	2	7
	3	2
	No response	22
Region not stated	1	7

There appears to be some variation across the State in the number of responses that source water from more than one supply source, with water users in the South and North West less reliant on only one source of supply (refer Table 3).

**Table 3.** Proportion of respondents reporting multiple sources of supply by Region.

Region	Proportion of users with more than one source of irrigation water
North West	10%
North	19%
North East	25%
Midlands	28%
South	8%

Table 4 details the survey responses in relation to who supplies irrigation water by region. This table takes into account that some irrigators access more than one source of water.

**Table 4.** Statewide source of supply for survey respondents during the 2016-16 irrigation season.

Entity	North West	North	North East	Midlands	South	Region not stated	Total
DPIPWE	55	40	50	24	33	3	205
Tasmanian Irrigation	37	74	21	35	43	2	212
CLIS		29		9			38
EMIT		1		9			10
TasWater	3	3	4	3	20		33
Hydro	1	13		13	3		30
Other entities			2	2		1	5
On farm	16	13	12	2	4	1	48
No response (but water was taken)	12	7	5	5	14	1	44
Nil (no water taken)	11	16	5	4	8	7	51

**Questions 4 and 5 Were you aware of the Extreme Dry Conditions Policy? If yes, did the Policy assist your business?**

During the 2015-16 the *Water Resources Management During Extreme Dry Conditions Policy* was developed and implemented for the first time. The survey sought information regarding water users' knowledge of the Policy and whether or not it assisted their business. In relation to awareness of the Policy, a total of 552 valid responses were received with 35% aware and 65% not aware of the Policy. Table 5 details the response by region.

The respondents who were aware of the Policy were asked whether or not the Policy assisted their business and those responses are detailed in Table 6. Some 37% or 71 respondents agreed or strongly agreed that the Extreme Dry Conditions Policy assisted their business. Both irrigators who take water under a Water Licence under the *Water Management Act 1999* and water users sourcing water from alternative sources consider that the Policy assisted their business.

**Table 5.** Awareness of the Extreme Dry Conditions Policy by region.

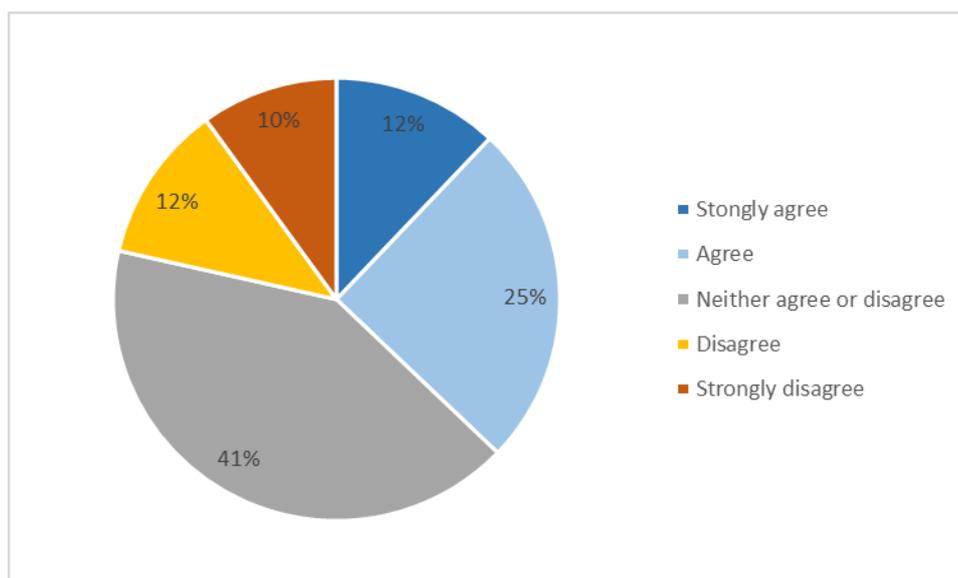
Region	Was the survey respondents aware of the Extreme Dry Conditions Policy?	
	Yes	No
North West	44	78
North	55	101
North East	28	49
Midlands	27	51
South	34	75
Region not stated	3	7
TOTAL	191	361

**Table 6.** Survey findings regarding whether the Extreme Dry Conditions Policy assisted farming businesses, based on 191 respondents who stated they were aware of the Policy.

Survey answer	Did the Policy assist their business	Source of water	
		DPIPWE – water licence	Other <sup>1</sup>
Strongly agree	12%	17	6
Agree	25%	20	28
Neither agree or disagree	41%	28	51
Disagree	12%	7	15
Strongly disagree	10%	5	14

1. The other category includes water entities such as Tasmanian Irrigation, EMIT, CLIS, TasWater, Hydro Tasmania and those respondents who stated their water was supplied from on-farms storages.

As shown in Figure 2, only 22% who were aware of the Policy disagreed to some level that the Extreme Dry Conditions Policy did not assist their business.



**Figure 2.** The Extreme Dry Conditions Policy supported farming businesses.

**Question 6 Were any limitations to supply placed on irrigation water delivered from a range of sources for the period October 2015 – April 2016?**

Question 6 asked respondents whether or not limitations were placed on water delivered from various sources. The sources listed included DPIPWE, Tasmanian Irrigation, Hydro Tasmania, EMIT, CLIS, TasWater or from other sources. It should be noted that water is not directly supplied from DPIPWE, rather the water users have an authority under the *Water Management Act 1999* to take water under a water licence. A total of 527 survey respondents completed this question and the answers are summarised in Table 7. This table needs to be considered in light of the information provided in Table 3 showing the proportion of water users sourcing water from more than one source of supply. Where water users answered this question for multiple sources of supply, only their responses in relation to which organisation/water entity supplied them with water (from Question 3) was considered a valid response.

**Table 7.** Limitations placed on the supply of water, by entity.

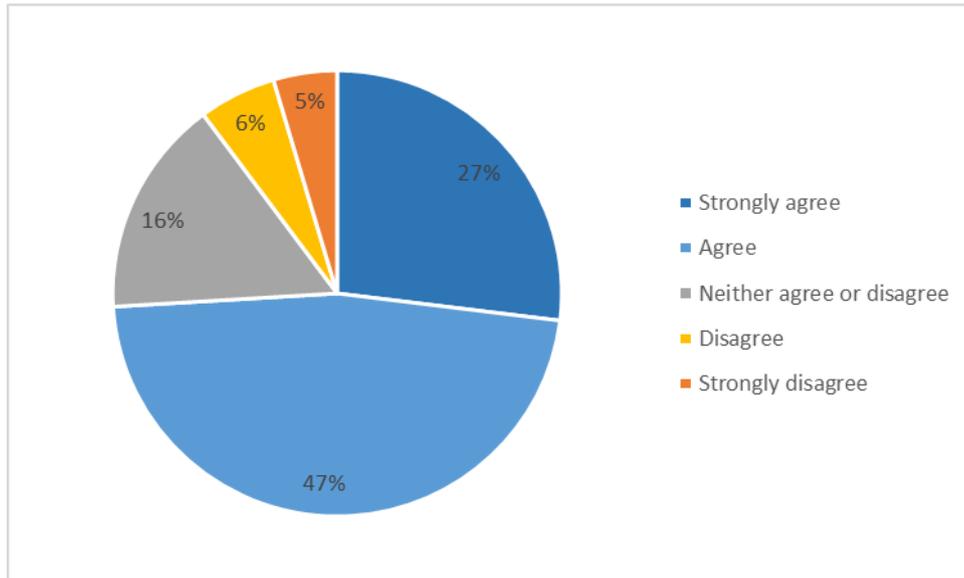
Source of supply	Limitation placed on supply – number and % for each entity		Total number of valid responses
	Yes	No	
DPIPWE (water licence)	81 (42%)	110 (58%)	191
Tasmanian Irrigation	48 (23%)	158 (77%)	206
Hydro Tasmania	12 (40%)	18 (60%)	30
EMIT	6 (75%)	2 (25%)	8
CLIS	4 (11%)	34 (89%)	38
TasWater	8 (29%)	20 (71%)	28
Other	0 (0%)	3 (100%)	3

**Question 7 Satisfaction with the service and support from relevant water providers.**

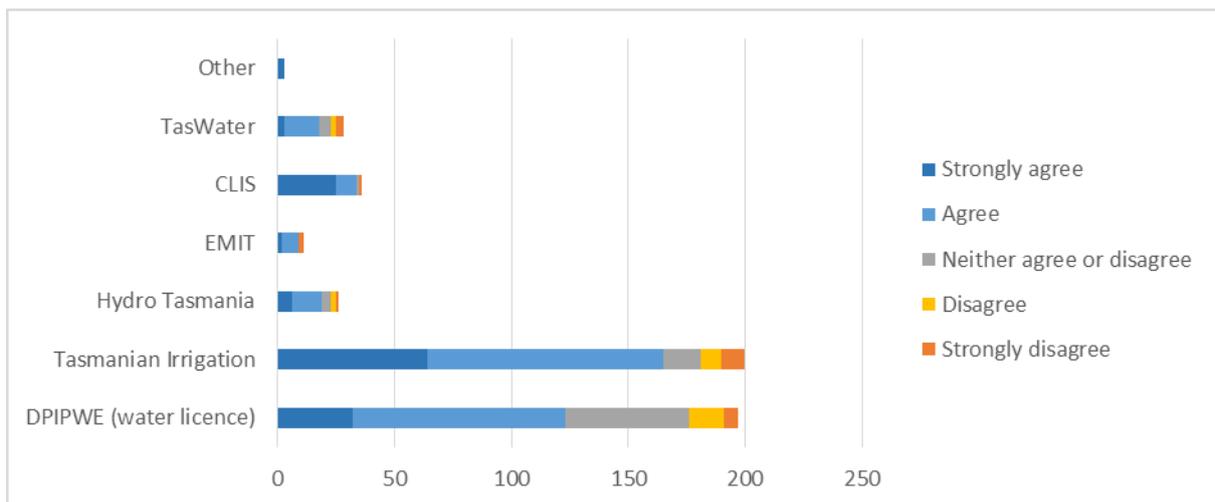
Question 7 asked if a water user was satisfied with service and support provided by a water entity. Answers were rated from strongly agree, agree, neither agree or disagree, disagree to strongly disagree. A total of 436 surveys provided meaningful responses to this question- the other 135 surveys either left this question blank or where those people who reported their source of supply was on-farm storage and hence the satisfaction with an external water provider was irrelevant. Where water users answered this question for multiple water providers, only their responses in relation to those entities that supplied them with water (from Question 3) was considered a valid response.

The overall satisfaction with the service and support provided by water providers across the whole State is illustrated in Figure 3. This shows that some 74% of responses agreed or strongly agreed that they were satisfied with the service and support provided to them by one or more water entity during the 2015-16 irrigation season.

Figure 4 and Tables 8 and 9 show the satisfaction levels for each water provider - as to whether a person was satisfied with the service and support that was supplied to them by their water provider.



**Figure 3.** Overall satisfaction level across all water providers.



**Figure 4.** Level of satisfaction by water provider.

**Table 8.** Level of satisfaction with each water provider (number of responses).

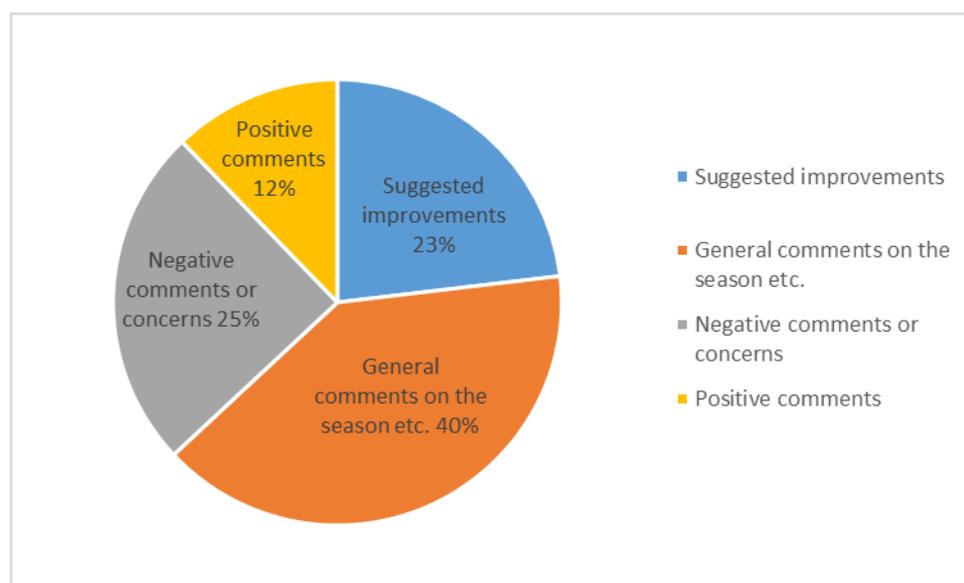
Water provider	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
DPIPWE (water licence)	32	91	53	15	6
Tasmanian Irrigation	64	101	16	9	10
Hydro Tasmania	6	13	4	2	1
EMIT	2	7	0	0	2
CLIS	25	9	1	0	1
TasWater	3	15	5	2	3
Other	3	0	0	0	0

**Table 9.** Overall satisfaction with a water provider (percentage).

Water provider	Strongly agree or Agree	Neither agree or disagree	Disagree or Strongly disagree
DPIPWE (water licence)	62%	27%	11%
Tasmanian Irrigation	83%	8%	10%
Hydro Tasmania	73%	15%	12%
EMIT	82%	0%	18%
CLIS	94%	3%	3%
TasWater	64%	18%	18%
Other	100%	0%	0%

**Question 8 Any further comments?**

Some 238 respondents took the opportunity to provide further comments at the end of the survey including general statements on the seasonal conditions, farming business or water supply; suggested improvements; positive feedback; and negative comments and concerns. Figure 5 categories the types of comments that were received in broad terms.



**Figure 5.** Types of comments received

There were 95 general statements regarding the seasonal conditions, farming business or water supply. Some respondents noted that without water during 2015-16 their particular business would have needed to destock or crops would have failed. Others detailed the strategies they had in place to cope with dry conditions (less stock, crops not planted, utilising water from bores or on-farm storages). It was also noted that it was a tough year with crop failures and in some instances water could not be taken because there was no flow in the river.

A range of improvements were suggested by 55 respondents that have been summarised, along with the key messages, in Table 10.

**Table 10.** Improvements suggested by survey respondents.

<b>Suggestion (number)</b>	<b>Key Messages</b>
Cut red tape (9)	<ul style="list-style-type: none"> <li>• Enable dam, weir and scheme construction</li> <li>• Make more water available</li> <li>• Build and encourage the development of more provide dams and district storages</li> </ul>
Restriction management (8)	<ul style="list-style-type: none"> <li>• Greater flexibility</li> </ul>
Improved infrastructure (8)	<ul style="list-style-type: none"> <li>• Supported more development in the South East Irrigation Scheme</li> <li>• Assistance with repair works</li> <li>• Ensure essential streamflow equipment is operational at critical times</li> <li>• Better flood warning systems in place</li> </ul>
Costs (7)	<ul style="list-style-type: none"> <li>• Costs reviewed, lowered and simplified</li> <li>• Irrigation scheme costs reflect what farmers want</li> </ul>
Unlicensed use (6)	<ul style="list-style-type: none"> <li>• Licence all dams</li> <li>• Monitor and prosecute illegal water extractions</li> <li>• Compulsory metering</li> </ul>
Improved communication (5)	<ul style="list-style-type: none"> <li>• Communication by the Department and Tasmanian Irrigation needs to be improved in relation to stock and domestic rights, imposition of restrictions and how water trading can be facilitated</li> </ul>
Water supply issues (4)	<ul style="list-style-type: none"> <li>• Need for an agreement between Hydro Tasmania and Mersey Irrigators</li> <li>• Reducing costs for the Dial Blythe scheme through natural filling</li> <li>• Obtaining additional water for Daisy Bank dam</li> <li>• Overlapping take periods for DPIPWWE allocations and Tasmanian Irrigation water</li> </ul>
Water management planning (3)	<ul style="list-style-type: none"> <li>• Review Clyde and Lakes Sorell and Crescent WMPs</li> <li>• EMIT to manage surety 8 water in the Macquarie WMP area</li> <li>• Review the flow measurement points in the South Esk WMP</li> </ul>
Environmental flows	<ul style="list-style-type: none"> <li>• Set too high</li> <li>• Not flexible in drought conditions</li> </ul>

In addition, 59 negative comments/concerns were received and 29 respondents made positive comments in relation to water management by the Department or their water entity. Table 11 summarises the negative comments raised through the survey. The positive comments praised the management efforts by various entities: Cressy Longford Irrigation Scheme (4 responses); Tasmanian Irrigation (18 responses); and DPIPWWE (7 responses).

**Table II.** Concerns and negative feedback raised by respondents.

<b>Water entity</b>	<b>Number of comments</b>	<b>Proportion of customers who made comments</b>	<b>Key issues</b>
Tasmanian Irrigation	25	12%	<ul style="list-style-type: none"> <li>• Cost of water</li> <li>• Restrictions/inadequate supply</li> <li>• Poor management and poor communication</li> <li>• Difficulty with transfers and trading</li> <li>• Focus is on water sales and not delivery</li> <li>• Scheme size is limited to water sales and not future potential</li> <li>• Duplication of DPIPWE services</li> </ul>
DPIPWE	22	11%	<ul style="list-style-type: none"> <li>• Water availability and restrictions</li> <li>• Unfair water allocation</li> <li>• Over regulation/red tape</li> <li>• Costs</li> <li>• Inadequate compliance of illegal usage</li> <li>• Impact of the South Esk Water Management Plan</li> </ul>
TasWater	4	12%	<ul style="list-style-type: none"> <li>• Poor communication or management</li> <li>• Water availability</li> </ul>
Hydro Tasmania	3	11%	<ul style="list-style-type: none"> <li>• Cloud seeding</li> <li>• Water availability and management of releases</li> </ul>
Other	4	Not calculated	<ul style="list-style-type: none"> <li>• Poor management/red tape</li> <li>• Costs</li> <li>• Water quality</li> </ul>

### 3. CONCLUSION

The 2015-16 Irrigation Satisfaction Survey provides a useful snapshot of the views of a range of different water users from around the State. Survey responses were obtained from a broad spectrum of irrigators, including people who hold water entitlements under the *Water Management Act 1999*, those who irrigate from water supplied as an irrigation right from a water entity such as Tasmanian Irrigation, CLIS, EMIT, or water that has been obtained through contractual arrangements with TasWater or Hydro Tasmania. A number of respondents reported that their water was sourced from a private dam or on-farm storage; the survey was not designed to collect information about these sources of water and it is not clear if on-farm storages related to dams filled in winter from a water licence or irrigation right or other authorisation to take water.

Notwithstanding that only 23% of surveys were returned, the water usage reported by those responses most likely represents a significant proportion of water usage during that period<sup>3</sup>. A number of survey respondents reported sourcing water from more than one source, with the highest proportion of users located in the Midlands (28%), North East (25%) and North (19%). It is also interesting to note that 51 respondents stated that they were not supplied with water during 2015-16 which is likely to be a result of the extreme dry conditions that prevailed.

Thirty five percent of survey respondents reported that they were aware of the *Water Resources Management During Extreme Dry Conditions Policy*. Of that number, 37% agreed or strongly agreed that the Policy assisted their farming business. Given that the implementation of this Policy is more relevant to licensees than to irrigators who source water from alternative means, it is not surprising that 41% neither agreed or disagreed that the Policy assisted their business.

The level of limitations placed on the supply of water during the 2015-16 season varied between entity. It ranged from 75% for EMIT<sup>4</sup> to 42% for DPIPWE, 23 % for Tasmanian Irrigation and 11% for CLIS.

The Statewide result of 74% satisfaction with the service and support provided by water entities shows that overall the majority of water users consider that they are getting very good level of service, which is pleasing given the difficult conditions which prevailed during the 2015-16 season.

There were 238 surveys that included additional comments and in broad terms these related to the seasonal conditions, suggested improvements as well as positive and negative comments and concerns. There were some common themes in the ideas for improvements and in the negative comments covering matters such as water availability and restrictions; costs, over regulation/red tape and compliance matters. Some of the positive comments also recognised the support they received from various entities (recognising some individual staff members) and that in 2015-16 conditions had been tough but without access to water, crops would have failed or destocking required.

In analysing the survey responses the ambiguity in some questions made it difficult to utilise all the responses, for example, where the source of supply had been written down as private dam or on-farm storage it was not clear whether or not water would have initially been supplied from a water entity or taken under a water licence.

In relation to Questions 6 and 7, some surveys provided answers for all the entities listed, rather than just their particular water provider. However in analysing the data it was considered that only answers relating to any limitations and to the services provided should relate to the source of supply listed on that particular survey form.

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<sup>3</sup> Based on ABS data, the water usage reported represents 66% of the annual average consumption for the previous five year period.

<sup>4</sup> Noting that only 8 valid responses to Question 6 were received from people supplied with water from EMIT so it is a small data set.

# ATTACHMENT I

## Letter to Irrigators regarding the Irrigation Satisfaction Survey 2015-16

Deputy Premier  
Minister for Education and Training  
Minister for Primary Industries and Water  
Minister for Racing  
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Email: [jeremy.rockliff@dpactas.gov.au](mailto:jeremy.rockliff@dpactas.gov.au)



### Irrigation Satisfaction Survey - Season 2015-2016

Dear Irrigator

As you would know, farming communities across the state have suffered from severe climatic events over the past 12-18 months starting in 2015 with drought conditions followed more recently by devastating floods that resulted in widespread damage in many areas. These events have left many in our farming communities facing significant challenges in restoring their businesses and importantly dealing with stress and hardship that life on the land can bring from the impact of drought and floods.

As the Minister for Primary Industries and Water, of real importance to me, is how access to water in one of the driest irrigation seasons on record affected and impacted your farming business and significantly, how water managers and irrigation trusts supported you during this period.

The enclosed Irrigation Satisfaction Survey seeks feedback from you as an irrigator on your experiences in the 2015-16 irrigation season, the support you received and your satisfaction with that support. The survey also seeks your ideas on suggested improvements and other feedback on water management issues of concern to you. I would encourage you to undertake the survey either by filling out the enclosed form and sending in the replied paid envelope or alternatively online at: [dppw.tas.gov.au/irrigationsurvey](http://dppw.tas.gov.au/irrigationsurvey)

Your feedback is important to allow us to learn from your experiences and improve operational water resource management in Tasmania.

Kind regards

A handwritten signature in blue ink, appearing to read "Jeremy Rockliff".

Jeremy Rockliff MP  
Deputy Premier  
Minister for Primary Industries and Water

August 2016



Please take the time to complete this survey. Once completed please place in the reply paid envelope provided and return post.  
 To complete this survey online visit - [dpiwwe.tas.gov.au/irrigationsurvey](http://dpiwwe.tas.gov.au/irrigationsurvey)  
 If you have any questions regarding this survey please contact - Water Enquiries 03 6165 3222  
 Thank you

1. Please circle your catchment area on the map or name your catchment in the box below.

2. For the period October 2015 to April 2016 in total, approximately how many ML of irrigation water did you utilise?

Please note this question is to gain an understanding of the total volume of irrigation water utilised in the state last season.



Please circle the appropriate response.

**3. Who supplies your irrigation water?**  
 (circle all relevant suppliers)

DPIPWE	GRESSY LONGFORD
TASMANIAN IRRIGATION	TASWATER
HYDRO TRANSFER	OTHER
EMIT	

Please circle the appropriate response.

**4. Were you aware of the Extreme Dry Conditions Policy?**

Yes	No
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Please circle the appropriate response.

**5. If yes to question 4. The "Extreme Dry Conditions Policy" assisted my business.**

STRONGLY AGREE	AGREE	NEITHER AGREE OR DISAGREE	DISAGREE	STRONGLY DISAGREE
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