Introduction

The NSW Grain Harvest Management Scheme (GHMS) promotes the safe and productive movement of grain. It provides up to 5% mass allowance for productivity and minimises the risk associated with the variable conditions of loading trucks at farms. It is designed to minimise heavy vehicle movements, protect roads and to increase productivity and efficiency of the grain industry.

The GHMS annual reporting is based on data provided to Roads and Maritime Services by Participating Grain Receivers (PGRs) during the July 2018 to June 2019 period. The total harvest figures in this report do not include crops not covered by the GHMS.

During the reporting period of FY19, most deliveries were made under the GHMS (75%). More than half of all deliveries utilised the allowable weight limit of 95-100% (57%).

Overall total breaches in FY19 did not vary significantly compared to other years: FY15 (5.30%), FY16 (4.10%), FY17 (2.70%), FY18 (3.60%) and FY19 (3.30%). A total of 1,784 one way trips were saved (using an average GHMS vehicle) in the same period.

Please note, the data provided to RMS in FY19 shows a 65% decrease in harvest size compared with FY18.

The data from this reporting period continues to reflect the drought conditions in NSW. The Australian Bureau of Agricultural and Resource Economics and Sciences reported that compared to the previous year, the summer grain harvest in NSW (which occurred during the period of January to June 2019) is estimated to have more than halved to just over 1 million tonnes (ABARES 2019).

Other impacts to the total harvest size recorded in FY19 concern the global wheat market demand trends. Notably, domestic feed grain prices in NSW have been higher due to low grain production in 2017-19 and increased demand for livestock feed.

As a result, wheat normally exported to global markets is being shipped from Western Australia and South Australia to Australia’s eastern states, including NSW (ABARES 2019).

This has been reflected in the downward trend of Australian wheat being less competitive on world wheat markets due to high domestic price. This may have impacted the data we received from PGRs this year, which reflects the below average total harvest numbers.

In 2019–20, wheat exports are forecasted to increase in value and volume due to increased production and lower domestic demand as drought conditions are expected to ease (ABARES 2019).

The below average total harvest numbers have impacted the following areas in GHMS reporting:

- **Total GHMS harvest figures** – In the previous reporting period (July 2017 to June 2018) the harvest size was 4,676,651 tonnes. This reporting period (July 2018 to June 2019) the harvest size was 1,621,352 (a 65% decrease).

- **Number of trips saved** - Due to the decreased harvest size, there were fewer deliveries made (a 63% decrease). There was a slight percentage increase in total trips saved from the GHMS in the July 2018 to June 2019 period (3.0%) when compared to the July 2017 to June 2018 reporting period (3.2%). The percentage of trips saved in the current reporting period is comparable with the previous reporting period.

The NSW Government and Roads and Maritime have continued the Drought Relief Heavy Vehicle Access Program, offering an additional $15 million toward the cost of maintenance and minor improvement work on council roads and roadsides, where those improvements will contribute to heavy vehicle access, in support of the drought relief freight task.

Roads and Maritime have also continued to work with freight and agricultural industries to support access for heavy vehicles carrying larger loads in order to safely and efficiently move feed, water and stock in drought affected areas (RMS 2019).
GHMS Objectives

1. **Promote** the safe movement of grain

2. **Facilitate** the movement of grain off farms to grain receivers during the peak harvest season

3. **Maximise** the productivity of the existing fleet of vehicles to complement an increase in on-farm productivity

4. **Minimise** the number of vehicle trips between farm gate and receival point

5. **Maintain** existing statutory obligations, including Chain of Responsibility laws

6. **Protect** road and bridge infrastructure

7. **Manage** excess loads on-site, rather than return those loads to the network

8. **Support** the competitiveness of the NSW grain industry on national and international market

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**Key Highlights**

### The Harvest
- **How big was the harvest?**
  - 1,621,352 tonnes

### Transportation of Grains
- **How many deliveries were made?**
  - GHMS: 39,397
  - NON-GHMS: 13,473

### Delivery Compliance
- **How many overmass breaches were recorded?**
  - FY15: 21,336
  - FY16: 9,578
  - FY17: 7,517
  - FY18: 5,362
  - FY19: 1,749

### What did we harvest?
- Wheat: 64%
- Barley: 16%
- Rice: 7%

### How many Local Government Areas (LGAs) participated?
- 47 LGAs participated in GHMS in FY19
- Data reported in FY19 covered PGR sites in 33 LGAs

### How many PGRs participated?
- FY17: 22
- FY18: 23
- FY19: 25

### How many trips were saved?*
- FY16: 9,525 trips
- FY17: 12,638 trips
- FY18: 4,678 trips
- FY19: 1,784 trips

*Approximates based on one-way trips using an average GHMS vehicle.

### What is the most common vehicle type?
- Prime mover and semi-trailer combination (6 axle)

### What were the trends in the breaches by Truck Type?
- Prime mover and semi-trailer (6 axle): 37%
- B-Double (9 axle): 29%
- Rigid Truck and Dog Trailer (6 axle): 7%
- Road Train (12 axle): 8%

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4 | NSW Grain Harvest Management Scheme FY19 Harvest Period
The Harvest

1.1 Overview of the Grains

What did we harvest?

- The total harvest for FY19 was 1,621,352 tonnes.
- In FY19, Wheat (63.84%), Barley (15.74%), Rice (7.37%) and Canola (7.25%) were the most prominent grains harvested.
- Comparatively in FY18, Wheat (61.43%), Rice (13.15%), Canola (12.57%) and Barley (6.59%) were the most prominent grains harvested.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total GHMS Harvest (tonnes)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY15</td>
<td>6,405,542</td>
</tr>
<tr>
<td>FY16</td>
<td>7,194,492</td>
</tr>
<tr>
<td>FY17</td>
<td>9,596,217</td>
</tr>
<tr>
<td>FY18</td>
<td>4,676,651</td>
</tr>
<tr>
<td>FY19</td>
<td>1,621,352</td>
</tr>
</tbody>
</table>

*Please note the total harvest figures displayed in this report are based on data reported by GHMS PGRs only. The total harvest figures in this report does not include crops not covered by the GHMS.
1.2 Region Participation

What were the top deliveries (trips) by Region**?

- Top deliveries were measured as percentages of total deliveries.
- For FY19 Riverina was the Region with the most deliveries (59.91%).
- Murray (16.40%) and Central West (8.78%) held the respective second and third largest share of deliveries.

Deliveries per Region

* NSW Local Land Services Regional grouping were used for this section of the report

1.3 LGA Participation

How many LGAs participated and what grains did they receive?

- Data reported from FY19 covered PGR sites in 33 LGAs.
- Federation Council (12.54%) and Coolamon (9.65%) received the highest number of deliveries.
- Most LGAs received wheat as the most prominent grain, followed by barley, and canola.
What type of vehicles are utilised for deliveries across each LGA?

- Across all deliveries, Truck and/or Trailer vehicles were the greatest type of vehicle used for deliveries (69%), followed by B-Double (20%) and Road Train vehicles (11%).
- In this reporting period, B-Double vehicles were underrepresented (as shown in the graph below). Contrastingly, Truck and/or trailer vehicles are highly utilised.

* Vehicles have been categorised into 3 types: Road Trains (which includes all Road Train vehicles such as AB – triples and Modular B-triples); B-Double vehicles, and Truck and/or trailer vehicles (which includes all other vehicles that are not a Road Train or B-Double such as Rigid Truck + dog trailer and Prime mover + semi-trailer combination).
1.4 PGR Participation

How many PGRs participated?

- **25 PGRs** participated in FY19’s GHMS, which shows consistent steady growth.
- Of these 25 PGRs, **20** provided data for reporting purposes.

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How many sites are there for each PGR?

- GrainCorp is the PGR with the most sites (57), followed by Sunrice (9), Emerald (5), Grainflow (5), and Grainlink (4).
- Under one quarter of the PGRs have 2 sites (21%). Just over half of the PGRs have 1 site (53%).
How many deliveries were made under GHMS?

- In the FY19 reporting period, 52,870 total deliveries (trips) were made. Most deliveries were under GHMS mass concession (75%).
- In the FY19 reporting period, 1,784 trips were saved from the NSW GHMS (3.4%). In the FY18 reporting period, 4,678 trips were saved from the NSW GHMS (3.2%).

How many deliveries were made per month?

- In the reporting period of FY19, the majority of GHMS and Non-GHMS deliveries occurred in November and December. Both months fall into the winter crop harvest period.
- April (part of the summer crop harvest period) is the third largest month for deliveries.
2.2 Eligible Vehicle Types

What was the most common vehicle type?

- Most deliveries (75%) were completed by GHMS eligible vehicles in FY19.
- The common vehicle type reported was the **Prime Mover and semi-trailer combination – 6 axles**.
- Most GHMS deliveries were made by Truck and/or trailer vehicles (69%), followed by B-Double (20%) vehicles and Road Train (11%) vehicles.

![GHMS - Types of vehicles* utilised](image)

* Vehicles have been categorised into 3 types: Road Trains (which includes all Road Train vehicles such as AB – triples and Modular B-triples); B-Double vehicles, and Truck and/or trailer vehicles (which includes all other vehicles that are not a Road Train or B-Double such as Rigid Truck + dog trailer and Prime mover + semi-trailer combination).
How productive were deliveries?

- Over half of the deliveries for both GHMS and Non-GHMS deliveries utilised the allowable weight limit of 95-100% (57%) whereby 100% represents the Legal Weight Limit (i.e. for GHMS deliveries, 100% includes the additional up to 5% mass provided under the GHMS).

- For GHMS only deliveries, 44% of deliveries loaded to the 95-100% of the allowable mass limit.

- For non-GHMS only deliveries, 14% of deliveries loaded to the 95-100% of the allowable mass limit.

- For both GHMS and non-GHMS vehicles, Prime Mover and Semi Trailer (6 axle) vehicles had the most number of deliveries in the 95-100% utilisation range (51%), followed by B-Double (9 axle) vehicles (22%).

- There is an opportunity to increase productivity levels, with under half (39%) of deliveries (both GHMS and non-GHMS) falling within the 0-95% mass utilised bracket.

- More than half of all deliveries made by vehicles utilised the allowable weight limit of 95% to 100% (57%), whereby 100% represents the Legal Weight Limit.
4.1 Overall Breach Trends

What are the year on year compliance trends?

- The number of total breaches has declined in FY19 (3.3%). FY17 had the lowest breach rate to date (2.7%).

- Overmass breaches refer to deliveries made by vehicles that have loaded above their Legal Weight Limit (LWL). LWL is the allowable weight limit vehicles can utilise based on their Concession Type. For vehicles using the GHMS Concession Type, their LWL already includes the additional up to 5% mass provided under the Scheme.

4.2 Breaches

How many overmass breaches were recorded?

- In the FY19 reporting period, 1,749 total breaches were reported (3.3%).
- The majority of breaches were in the up to 5% overmass range (93%).

4.3 Overmass Deliveries

What is the breakdown of breaches by numbers?

- For breaches over 10% above the legal weight limit, most were under non-GHMS concessions (62%).

<table>
<thead>
<tr>
<th>Year</th>
<th>GHMS</th>
<th>Non-GHMS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY16</td>
<td>846</td>
<td>780</td>
<td>1626</td>
</tr>
<tr>
<td>FY17</td>
<td>51</td>
<td>43</td>
<td>94</td>
</tr>
<tr>
<td>FY18</td>
<td>11</td>
<td>18</td>
<td>29</td>
</tr>
<tr>
<td>FY19</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
</tr>
</tbody>
</table>

* GHMS percentages are a total of GHMS deliveries
* Non-GHMS percentages are a total of Non-GHMS deliveries
* Total percentages are a percentage of all deliveries
Which vehicle types had the greatest number of breaches?

- In the FY19 reporting period, most breaches were conducted by 5 vehicle types (86.58%).
- The majority of breaches were produced by Prime Mover and Semi Trailer (6 axle) vehicles (36.54%). This is a decrease from FY18 (5.58%). Prime Mover & Semi Trailer (6 axle) vehicles conducted more than half of all deliveries in FY19 (52.53%).
- The remaining breaches were conducted by vehicles other than the 5 shown in the graph below (13.42%).
Conclusion

5.1 Summary

What has been achieved in this reporting period?

- The data and scheme participation by councils and industry continue to show growing support for the GHMS. Roads and Maritime will continue to administer the scheme, progress previously identified opportunities for improvement, and work with the National Heavy Vehicle Regulator (NHVR) and Transport for NSW (TfNSW) to implement any further changes. This report will also be provided to the Grain Harvest Management Scheme Consultative Committee for consideration.

- Roads and Maritime will also continue to monitor the data for compliance purposes to ensure the scheme continues to provide productivity benefits to compliant operators, while ensuring road safety and road use is sustainably maintained.

5.3 The Future

What is the future vision for the GHMS?

- **Drought support** – Given the sustained drought conditions, Roads and Maritime has continued to work with freight and agricultural industries to support access for heavy vehicles carrying larger loads in order to safely and efficiently move feed, water and stock in drought affected areas. This support falls in line with the broader NSW government drought relief support for farmers and their families. In partnership with the National Heavy Vehicle Regulator, Roads and Maritime have also enhanced and streamlined the assessment of drought relief permit applications.

- **Stakeholder engagement** – In the FY18 GHMS report, it was identified that there is scope to improve the quality and consistency of data reporting received from PGRs. Changes have been made to the Roads and Maritime website to support PGRs reporting on the GHMS. Roads and Maritime are continuing to work with PGRs to simplify data collection processes to ensure data accuracy and reporting efficiency.

- **Increase participation** – There has been steady growth in LGA and PGR participation, and Roads and Maritime is currently engaging industry stakeholders (including the GHMS Consultative Committee members) to help identify and engage PGRs.

- **Chain of Responsibility** – Stakeholders in the grain industry have Chain of Responsibility obligations under the Heavy Vehicle National Law. The Grain Industry Transport Code of Practice (Transport Code) was recently updated in 2018 to ensure compliance with changes to the National Heavy Vehicle Law. The Transport Code was developed by the grain industry as part of the Australian Grain Industry Code of Practice Industry Code (Industry Code) and should be reviewed in conjunction with the Industry Code. At present, Roads and Maritime are engaging PGRs to better understand current practices of overmass management. Opportunities are also being examined for adoption of a consistent approach to the management of overmass deliveries to align with Chain of Responsibility requirements under the Heavy Vehicle National Law.
### Table 4: Councils that participated in the GHMS in FY19

<table>
<thead>
<tr>
<th>No.</th>
<th>Participating Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BERRIGAN*</td>
</tr>
<tr>
<td>2</td>
<td>BLAND*</td>
</tr>
<tr>
<td>3</td>
<td>BOGAN*</td>
</tr>
<tr>
<td>4</td>
<td>CABONNE*</td>
</tr>
<tr>
<td>5</td>
<td>CARRATHOOL*</td>
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<tr>
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<td>COOLAMON*</td>
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<tr>
<td>7</td>
<td>COONAMBLE*</td>
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<tr>
<td>8</td>
<td>COOTAMUNDRA/GUNDAGAI*</td>
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<tr>
<td>9</td>
<td>COREE*</td>
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<td>COWRA*</td>
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<td>FORBES*</td>
</tr>
<tr>
<td>14</td>
<td>GILGANDRA*</td>
</tr>
<tr>
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<td>GREATER HUME*</td>
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<tr>
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<td>GRIFFITH*</td>
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<tr>
<td>17</td>
<td>GUNNEDAH*</td>
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<tr>
<td>18</td>
<td>GWYDIR*</td>
</tr>
<tr>
<td>19</td>
<td>HILLTOPS*</td>
</tr>
<tr>
<td>20</td>
<td>JUNEE*</td>
</tr>
<tr>
<td>21</td>
<td>LACHLAN*</td>
</tr>
<tr>
<td>22</td>
<td>LEETON*</td>
</tr>
<tr>
<td>23</td>
<td>LIVERPOOL PLAINS*</td>
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<tr>
<td>24</td>
<td>LOCKHART*</td>
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<tr>
<td>25</td>
<td>MOREE PLAINS*</td>
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<tr>
<td>26</td>
<td>MURRAY RIVER*</td>
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<td>27</td>
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<td>NARRABRI*</td>
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<td>NARRANDERA*</td>
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<td>NARROMINE*</td>
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<tr>
<td>32</td>
<td>PARKES*</td>
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<td>33</td>
<td>TEMORA*</td>
</tr>
<tr>
<td>34</td>
<td>WEDDIN*</td>
</tr>
</tbody>
</table>

* Data reported in FY19 covered PGR sites in these LGAs.