

# 2011 University of Vermont Combined Research and Extension Annual Report of Accomplishments and Results

Status: Submitted

Date Submitted: 04/02/2012

## I. Report Overview

### 1. Executive Summary

AAAAAAAAAAÖæ&@A^æiÉÁää--^!^}cÁ]! [\*!æ { •A& [ { ]|^c^Á^çæ~æcá [ }•Ác@æcÁ [ ]ä}cÁc [Ác@^Áä { ]æ&cÁ [~Ác@^á!Á^~ [!c•ÉÁÖæ&@ ^æ!ÉÁæ} [c@^!Á•^&c [!Á [~Ác@^Á^& [ ] [ { ^ÉÁæÁ} ^, Á& [ { { ~}ác^Á [!Á} ^, Á { ^ { à^!Á [~Á |ÉPÁà^} ^~ácÁ-! [ { Á]æ!cá&ä]æcá } \*Áä } Öçc^} •ä [ }Á^á ~&æcá [ ]æ!Á]! [\*!æ { •Ác@æcÁ@^! ]Á] ^ [ ]|^Á { æ\^Áà^cc^!Áá^&ä•ä [ ] •Áàæ•^áÁ ~ [ ] Ác@^Á!^•^æ!&@Á [~ÁSæ } á Ö!æ }cÁV} äç^! •ácá^ÉÁV@^ÁF!€<sup>o</sup>Á^æ!Á [~ÁŠÖWc•Á& [ { àä }^áÁ , äc@Á}^æ!^Ác@^Á•æ { ^Á } ~ { à^!Á [~Á^~æ!•Á [~Á [ ~c!^æ&@É à^- [!^Áæ } á!æ-c!Ác@^ÁÖ [ [ ]^!æcáç^!ÁÖçc^} •ä [ ]ÁÜ^•c^ { Á , æ•Á&!^æc^áÁä }ÁFJFIÉÁ@æ•Á@æá!æÁ]! [~ { }á!á { ]æ&cÁ [ ] à [c@Ác@^Á^& [ ] [ { ä&Áæ } á! • [ &æ!Á-æ!á&Á [~Ác@ä•Á}æcá [ ]ÉÁY@^c@^!Áác!á•Áä { ]! [çá } \*Áæ\*!ä&~|c~!æ!Á]! [á~&cá [ ]Ác@æc!á • } [c^á!á }Ác@ä•Á!^ [ ]!c!á ~!á } \*ÁG€FFÉÁ [!Á- [!Á@^! ]ä } \*Áä }&!^æ•^Áæ\*!ä&~|c~!æ!Á]! [á~&cá [ ]Ác [Á ~ ]!^&^á!^}c^á!Áç^! • [ç^!Ác@^Á]æ•cÁ•^ç^!æ!á!&æ!á^ÉÁc@^ÁcÉÖÚÁæ } á!c@^ÁÖÖÚÁ@æç^!Áb [ä] ^áÁ- [!&^Ác [ Áæ!á!c@^Áá!Áç^! [ ] { ^ }cÁ [ -

GEFFAW)äç^!•öc^Á[-ÁX^! { [ ]}clÔ [ { ää }^äáÜ^•^æ!&@hæ}áíÒçc^••ä [ }ÁCE} } ~ æ|áÜ^ [ !:cÁ[-ÁCE&& { [ ]}i•@ { ^ }c•hæ}ááÜ^•~|c•

**2. Brief Explanation**

ÁÁÁÁÁÁÁÁV@^!^Áä•ÁæÁ& [ [ ] ]^!æçáÇ^Áæ\*!^ ^ { ^ } cÁ , äc@Ác@^Á- [ ~ !Á•cæc^•ÁX^! { [ ] }cÉÁ Tæä } ^ÉÁB^ , ÁPæ { ] •@ä!^Éhæ } ä Tæ••æ&@~ •^cc•Ác [ Á! [ cæc^ÁæÁ { ^!äcÁ!^Çä^ , Á ]! [ &••ÉÁX^! { [ ] }cÁä•Áä~ ^Áä } ÁG€F I È

**III. Stakeholder Input**

**1. Actions taken to seek stakeholder input that encouraged their participation**

- W•^Á [-Á { ^äæÁc [ Áæ } } [ ~ } &^Á ] ~ à|ä&Á { ^hçä } \*•Áæ } áÁ|ä•c^ } ä } \*Á•^••ä [ ] •
- Væ! \*^c^áÁä } Çäcæcä [ ] Ác [ Ác!æäáçä [ ] } æ|Á•cæ\^@ [ |á^!Á\*! [ ~ ] •
- Væ! \*^c^áÁä } Çäcæcä [ ] Ác [ Ác!æäáçä [ ] } æ|Á•cæ\^@ [ |á^!Áä } áäÇäá ~ æ|•
- Væ! \*^c^áÁä } Çäcæcä [ ] Ác [ Á•^|^&c^áÁä } áäÇäá ~ æ|•Á-! [ { Á\*^ } ^!æ|Á ] ~ à|ä&
- Ü~!ç^~Á [-Ác@^Á\*^ } ^!æ|Á ] ~ à|ä&
- Uc@^!ÁÇ•^^Á } æ!|æçáÇ^Á- [ !Á^cæá|•D

**Brief explanation.**

ÁÁÁÁÁÁÁÁB^æ!|~Áæ|Á! [ \*!æ { Á~ [ !c•Áæ•\Á } æ!çä&ä ] æ } c•Áä-Ác@^Á! [ \*!æ { { ä } \*Á { ^c•Ác@^ä!Á^ç } ^&cæcä [ ] •Áæ } ä æ•\•Ác@^ { Á- [ !Áä } ] ~ çhc [ Áà^Á& [ ] •ä^!^áÁ- [ !Á~c~!^Á! ] [ \*!æ { { ä } \*ÉÁÁÜ! [ \*!æ { Á•c!~&c~!^Áæ } áÁ- [ &~•Áæ•Á , ^| æ•Áä^|äç^!~Á { ^c@ [ á•Áæ!^Á& [ ] •ä^!^áÁ- [ !Á~c~!^Á! ] [ \*!æ { { ä } \*Áä } &|~äá } \*Á~c~!^Á!^•^æ!&@È ÁÓ [ |]æä [ !æcä [ ] •Áæ!^Áä } äcäæcä^ááàæ•^áÁ [ ] Á&|ä^ } c•Áäá^ } çä-á^áÁ } ^^á•Á•~&@Áæ•Ác@^Á T ä \*!æ } çÁÓ ä ~ &æcä [ ]

G€FFAW}āç^!•āc^A[-AX^! { [ ]cŌ [ { āi}^āāŪ^•^æ!&āā}āŌçc^••ā [ }ACE) } ~ æ|āŪ^ [ !c[-ACE&& [ { ]i•@ { ^}c•kæ}āŪ^•~|c•

**2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them**

**1. Methods for collecting Stakeholder Input**

T^cā} \*Ā , āc@Ac!æāācā [ ]æ|āŪcæ\^@ [|ā^!Ā\*! [ ~ ] •  
Ū~!ç^Ā [-Āc!æāācā [ ]æ|āŪcæ\^@ [|ā^!Ā\*! [ ~ ] •  
T^cā} \*Ā , āc@Ac!æāācā [ ]æ|āŪcæ\^@ [|ā^!Ā} āāçāā ~ æ| •  
Ū~!ç^Ā [-Āc!æāācā [ ]æ|āŪcæ\^@ [|ā^!Ā} āāçāā ~ æ| •  
Ū~!ç^Ā [-Āc@^Ā\*^} ^!æ|Ā] ~ à|ā&  
T^cā} \*Ā• ] ^ā&ā&æ||^Ā , āc@Ā [ ] }Ēc!æāācā [ ]æ|Ā\*! [ ~ ] •  
Ū~!ç^Ā [-Ā] ^ā&ā&æ||^Ā , āc@Ā [ ] }Ēc!æāācā [ ]æ|Ā\*! [ ~ ] •  
T^cā} \*Ā• ] ^ā&ā&æ||^Ā , āc@Ā [ ] }Ēc!æāācā [ ]æ|Ā} āāçāā ~ æ| •  
Ū~!ç^Ā [-Ā] ^ā&ā&æ||^Ā , āc@Ā [ ] }Ēc!æāācā [ ]æ|Ā} āāçāā ~ æ| •  
T^cā} \*Ā , āc@Ā} çācĀĀ^•^!^c^ĀĀ} āāçāā ~ æ|Ā-! [ { Āc@^Ā\*^} ^!æ|Ā] ~ à|ā&  
Ū~!ç^Ā [-Ā•^!^c^ĀĀ} āāçāā ~ æ|Ā-! [ { Āc@^Ā\*^} ^!æ|Ā] ~ à|ā&

**Brief explanation.**

ÀÀÀÀÀÀÀÀ  
ÀÀÀÀÀÀÀÀX^! { [ ]cĀ@æ•ĀæĀ [ [ ] ~ |æcā [ ]Ā [-Ā~ } ā^!ĀĪ €€€€€€Āæā~|c•ĒĀĀcĀ•cæcā•cā&æ||^Āçāæà|Ā•æ { ]|^Ā [-Āc@^Ā] ~ à|ā&Ā  
ā [ ]^Ā { [ •cĀ^Āæ!•Āæ\ā} \*Ā ~ ^cā [ ] •Ā [-Āā { [ ] [icæ] &^ĒĀV@^Ā [ ç^!ĀF€€€Ā^ç^} c•Ā^æ&@Ā^ĀæĪĀ] ! [ çāā^  
[ ] [ !c~ } āc^Ā-!Ā-^^āā&ā [ ]Ā^çæ|æcā [ ] •ĒĀŪ [ { ^Ā] ! [ \*!æ { •Āæ|Ā• [Ā~•Ā•] ^ā&ā&Ā [-&~Ā\*! [ ~ ] •Āæ} ā  
æāçā• [ !•Ē

**3. A statement of how the input will be considered**

Q}Āc@^ĀŌ~ā•^cĀŪ! [ &^••  
V [ĀQā^} cā-ĀŌ { ^! \*ā } \*ĀQ••~^•  
Ū^āā!^cĀŌçc^} •ā [ ]ĀŪ! [ \*!æ { •  
Ū^āā!^cĀŪ^•^æ!&@ĀŪ! [ \*!æ { •  
Q}Āc@^ĀŪcæ--ĀPāĪā} \*ĀŪ! [ &^••  
Q}Āc@^ĀcĒ&cā [ ]ĀŪ|æ} •  
V [ĀŪ^cĀŪ!ā [ !ācā^•

**Brief explanation.**

ÀÀÀÀÀÀÀÀcĒ•ĀæĀ { æ||Ā•cæcĀĀ&| [ •^Āc [ Āc•Ā&ācā : ^ } •Āæcāæ||Ā|^ç^!@ĒĀ& [ ]|^&c^ĀāāæcæĀĀ•Ā~ •^āĀc [ Ā!^ā} ^ĒĀ!^ { [ ç^Ā [ !  
&!^æcĀĀ}^ , Ā^ā~ &æcā [ ]æ|Ā] ! [ \*!æ { •Āc@æcĀ , ā||Ā•^!ç^Āc@^Ā} ^^ā•Ā [-Āc@^Ā] •cæcĀĒ

**Brief Explanation of what you learned from your Stakeholders**

ÀÀÀÀÀÀÀÀQ} &!^æ•Ā•~ [ ] [ !cā- [ !Ā [ &æ|Ā- [ [ āĀ•^c^ { •Ā!^•^æ!&@Āæ} āĀ^çc^} •ā [ ]Ē  
ÀÀÀÀÀÀÀÀ  
ÀÀÀÀÀÀÀÀQ [ ] [ !cæ} &^Ā [-Ā- [ ! { ~|æĀ~ } ā•Āā}Ā•~ [ ] [ !cā} \*Āā}-!æ•c!~ &c~!^Āc [Ā•~ [ ] [ !cĀ& [ { { ~}ācā^•Āā}Āāā•æ•c^!•Ē

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ] cÄÖ [ { ää}^äÄÜ^•^æ!&@hæ} äÄÖçc^••ä [ }ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ] |ä•@ { ^} c•hæ} äÄÜ^•~|c•

QXÉÄÖç ] ^} ääc^!^ÄÜ^ { { æ!^

| Extension |                | Research |             |
|-----------|----------------|----------|-------------|
|           | 1890 Extension | Hatch    | Evans-Allen |
| FÏÏJ€J    | €€             | FÏGÏÏ€F  |             |

**V. Planned Program Table of Content**

| S. No. | PROGRAM NAME  |
|--------|---|
| F      | Ö@ä ä@[ [ äÄUà^•äc^   |
| G      | Ö [ { { ~ }äc^ÄÖ^ç^ [ [ { ^}cÄæ} äÄc@^ÄÜ^!• [ ]}æ Äæ} äÄQ}c^  ^&c~æ ÄÖ^ç^ [ [ { ^}cÄ[-ÄY [ ~c@Äæ} äÄCEä~ c• |
| H      | Ø [ [ äÄÜæ-^c^  |
| I      | Ö [ äæ ÄØ [ [ äÄÜ^&~!äc^Äæ} äÄP~ } *^!  |
| Í      | Ü~•cæä}æà ^ÄÖ}^! *^   |
| Î      | W!äæ}ÄP [ ] ÄÜ [ ä }cÄÜ [ ~!&^ÄÜ [    ~cä [ ]   |
| Ï      | Ö ä { æc^ÄÖ@æ} *^   |

GEFFAW)äç^!•ic^A[AX^! { [ ]clÖ [ { äi}^äáÜ^•^æ!&@hæ}á!Öçc^••ä [ ACE) } ~æ|áÜ^ [ [!c[-ACE&& { [ ]!•@ { ^}c•hæ}á!Ü^•~|c•

**V(A). Planned Program (Summary)**

**Program # 1**

**1. Name of the Planned Program**

Ô@i|â@[ [ á!Uà^•ic^

**V(B). Program Knowledge Area(s)**

FÉÁÚ! [ \*!æ { ÁS} [ , |^á \*^ACE!^æ•hæ} á!Ü^!&^} cæ\*^

| KA Code | Knowledge Area  | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---|-----------------|-----------------|----------------|----------------|
| Í€F     | P^, Aæ} á!Q { ]! [ç^á!Ø [ [ á!U! [ &^••á} *<br>V^&@} [ [ ] *!á• | €Ä              |                 | í Ä            |                |
| Í€I     | Ö [ ] • { ^!ÁÖ& [ ] [ { ä&•                                     | €Ä              |                 | í Ä            |                |
| Í€J     | Ö& [ ] [ { ä&V@^ [ !^Áæ} á!T^c@ [ á•                            | €Ä              |                 | H Ä            |                |
| Í€F     | P^c!á^} c!áÖ [ { ] [ •!áç [ ] Á [-ÁØ [ [ á                      | €Ä              |                 | í Ä            |                |
| Í€H     | P^c!áç [ ] ÁÖá~ &æç [ ] Áæ} á!Ó^@æçá [ !                        | J€Ä             |                 | G€Ä            |                |
| Í€I     | P^c!áç [ ] Áæ} á!P^ } *^!Áá } Ác@^ÁÚ [ ] ~ æçá [ }              | F€Ä             |                 | í Ä            |                |
| ÍGI     | P^æ c@^!Š!-^•c^!^   | €Ä              |                 | íí Ä           |                |
|         | <b>Total</b>  | F€€Ä            |                 | F€€Ä           |                |

**V(C). Planned Program (Inputs)**

**1. Actual amount of FTE/SYs expended this Program**

| Year: 2011                  | Extension |      | Research |      |
|-----------------------------|-----------|------|----------|------|
|                             | 1862      | 1890 | 1862     | 1890 |
| Ú æ}                        | G€G       | €€€  | €€J      | €€€  |
| CE&c æ áÜæá!Ü! [-^••! [ ] æ | F€I       | €€€  | í€F      | €€€  |
| CE&c ~æ ÁX [ ] ~ } c^^!     | €€F       | €€€  | €€€      | €€€  |

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

|          |
|----------|
| Research |
|----------|

GEFFAW}äç^!•öc^Á[~ÁX^!{ [ ]çlÖ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ ACE) } ~æ!áÜ^ [ !çÁ[-ÁCE&& { ]!•@ { ^}c•kæ}á!Ü^•~|c•

## V(D). Planned Program (Activity)

### 1. Brief description of the Activity

AAAAAAAAÖæà^c^•ÁÖä~&æcä [ }KÁ Y [ !\•@ [ ]Á•^!ä^•ÉÁ•ä } \*|^Á•^••ä [ }Á , [ !\•@ [ ]•ÉÁ-æ&cÁ•@^c•ÉÁ}^ , •|^cc^!  
 AAAAAAAAA  
 AAAAAAAAA[ [ äÉÁÖ~|c~|^ÉÁæ}á!Ü^æää } \*ÁÉÁæÁFÉHÁ@ [ ~|^Ác!æä}Éc@^Éc!æä}^!Á•^••ä [ ]Á- [ !Áç [ ! ] }c^!^!•Dc^æ&@^!•Ác [   
 ä [ ]|^ ^ { }ç!c@^Á!Á!^•• [ ]Á&~!|ä&~|~ { Á- [ !Á!|^É\ä}á!^\*æ!c^}Ác@! [ ~\*@Á\*!æá^ÁGE  
 AAAAAAAAA  
 P^æ|c@^ÁÖæcä } \*KÁÉÁB~ç!äcä [ ]Á&|æ••^•Áá^•ä\* }^áÁ- [ !ÁæÁ , äá^Á!æ } \*^Á [-Á] ^ [ ]|^ÉÁ , äc@Áæ}Á^ { ]@æ•ä•á [ ]Á}æcä [ }æ|   
 äá^æ!^Á\*~äáæ }&^ÉÁÜæ!cä&ä]æ}c•Á!^æ!}Ác@^Á!æc^•ç!ä}~ [ ! { æcä [ ]Áæà [ ~çÁ@ [ , Ác [ Á&@ [ [ •^ÁæÁ@^æ|c@^Áá^cÉÁ!æ&cä^Á- [ [ ä   
 •æ-^c^Áæ }á!c [ Áä ]& [ ! ] [ !æc^Á ]@^•ä&æ|Áæ&cäçäc^Áä}c [ Ác@^á!Ááæ^ÉÁÖ|æ••^•Á!æ } \*^Á-! [ { Á [ ]^Ác [ Á•äçÁ•^••ä [ ]•ÉÁ , äc@Ác@^   
 c [ ]ä&^Ácæä [ !|^áÁ- [ !Ác@^Á\*! [ ~]Á!^~^•cä } \*Ác@^Á! [ !\*!æ { É

### 2. Brief description of the target audience

AAAAAAAA  
 AAAAAAAAA~ÁACEä~|c•  
 AAAAAAAAA~ÁACE\*^ÁG í ÁÉÁ í ÁCEä~|c  
 AAAAAAAAA~ÁACE\*^ÁKÁFÁÉÁ í ÁÜ!^ÉÜ&@ [ [ ]  
 AAAAAAAAA~ÁÁÖ [ { { }~}äcá^•KÁŠ [ &æ!ÁÜ~ä&äæ]•DŠ^æá^!  
 AAAAAAAAA~ÁÁÖçc^}•ä [ ]KÁÖæ&~|c~DÜcæ~  
 AAAAAAAAA~ÁÁÜ~ ä!ä&KÁ í ÉFGÁÇÖ@ä!á!^}D  
 AAAAAAAAA~ÁÁÜ~ ä!ä&KÁÖ [ ||^\*^ÁÜc~á^}c•  
 AAAAAAAAA~ÁÁÜ~ ä!ä&KÁÖæ { ä!ä^•  
 AAAAAAAAA~ÁÁÜ~ ä!ä&KÁÖ^}^!æ|  
 AAAAAAAAA  
 AAAAAAAAA

### 3. How was eXtension used?

AAAAAAAAU~!Á}~ç!äcä [ ]Áæ}á!- [ [ äÁ• ] ^&äæ!ä•ç!@æ•Áçä•äc^á!c@^ÁÖæ { ä!ä^•ÉÁÖ [ [ äÉÁæ } á!Öçc } ^••ÁÖ [ { { }~}äc^Á [-ÁÜ!æ&cä&^   
 { æ } ^Ácä { ^•Á•^æ!&@ä } \*Á- [ !Á!^•^æ!&Éææ•^áÉÁ ] ^!É!^çá^ , ^á! } ~ç!äcä [ ]Áä}~ [ ! { æcä [ ]Ác [ Á^! ] Á&|ä^ } c•Áæ } á!æ!• [   
 , @^} Áá^ç!ç [ ] ä } \*Á!^•• [ ] Á ]æ } •Á- [ !ÁP^æ|c@^ÁÖæcä } \*Á , [ !\•@ [ ]•ÉÁÁV@^Á@æç^Á~•^á!æ!cä!^•Áæ } á!~~ä&^Áæ } á   
 @^æ|c@^Á!^&ä] ^•Á-! [ { Ác@^Á•äc^É

## V(E). Planned Program (Outputs)

### 1. Standard output measures

| 2011   | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|--------|------------------------|--------------------------|-----------------------|-------------------------|
| Actual | 111                    | HF€€                     | 11€                   | €                       |

### 2. Number of Patent Applications Submitted (Standard Research Output)

#### Patent Applications Submitted

Y^æ!K GEFF  
 Ç&c~æ|K €

GEFFAW)äç^!•ic^Á[-ÁX^! { [ ]cáÔ [ { ää}^ááÜ^•^æ!&@hæ}ááÖçc^}•ä [ ACE) } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•hæ}ááÜ^•~|c•

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

|               |                  |                 |              |
|---------------|------------------|-----------------|--------------|
| <b>2011</b>   | <b>Extension</b> | <b>Research</b> | <b>Total</b> |
| <b>Actual</b> | €                | î               | î            |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Ô [ ]-^!^}&^  
 Þ [ cá!^ [ !cá } \* Á [ } Ác@î•ÁU~c ] ~cÁ- [ !Ác@î•ÁCE } } ~æ|ÁÜ^ [ !c

**Output #2**

**Output Measure**

Ô [ ]•~|cæcá [ }

**Year**                      **Actual**  
 GEFF                              J€

**Output #3**

**Output Measure**

Ô [ ]•~ { ^!ÁÜ~ à|î&æcá [ }

**Year**                      **Actual**  
 GEFF                              G

**Output #4**

**Output Measure**

Ô ~ !î&~|~ {  
 Þ [ cá!^ [ !cá } \* Á [ } Ác@î•ÁU~c ] ~cÁ- [ !Ác@î•ÁCE } } ~æ|ÁÜ^ [ !c

**Output #5**

**Output Measure**

Øæ&cÁÜ@^^c•

**Year**                      **Actual**  
 GEFF                              F





**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME   |
|--------|--|
| F      | Þ~ { à^!Á[-Á]^ [ ] ^Á, @ [Áâ^ç^ [ ]ÁæÁ]  æ} Ác [ Áâ { [ ]! [ç^!Áâ^cæ! ^Á] !æ&cä&^•   |
| G      | Þ~ { à^!Á[-Á]^ [ ] ^Á, @ [Á^ç] æ} äÁ [ !Á&@æ} *^Ác@^á!Á] !^-!^} &^Á- [ !Á [ !Áæccäc ~ ä^•Áæä [ ~cÁ@^æ c@^ - [ !á•  |
| H      | Þ~ { à^!Á[-Á]^ [ ] ^Á, @ [Á@æç^Áæ} Áâ} &!^æ•^áÁ] !^-!^} &^Á- [ !ÁæcÁ ^æ•cÁ [ ]^Á-! ~äcÁ [ !Áç^!^cæà ^É   |
| I      | Þ~ { à^!Á[-Á]^ [ ~c@Á [ !Áæä~ c•Á, @ [Á•^!-Á!^] [ !cÁæ} Áâ} &!^æ•^Áâ} Á { æ•c! ^Á [ -Ác@^Á ä-^Á•\á]  •ÁP^æ c@^ Šä-^•c^ ^!Ö@ [ ä&^•Áæ} ä!Ö&ä!•ä [ } ÁTæ\ä} *É                         |
| í      | Þ~ { à^!Ác@^Á]^ [ ] ^Ác@æcÁ•@ [ , Áæ} Áâ { [ ]! [ç^ { ^} cÁâ} Á@^æ c@~ ^Áæcä} *Á] !æ&cä&^•   |
| î      | Öçæ ~æcä} *Ác@^Áæ&&^] cæ} &^Á [-Á!^- [ ! { ~ æc^á! [-Á!^- [ ! { ~ æc^á!-æç [ !^á! { ä \Áâ} Á•&@ [ [ ]•   |
| ï      | Ó~ !; } Áæ} ä!^æ!; KÁQ} &^} cäçä : ä} *Á] @~ •ä&æ Áæ&cäçäc~Áâ} Á& [   ^*^Á-!^•@ { æ}   |
| ì      | Ú!^àä [ cä&^•Áæ} ä!Á] ! [ ää [ cä&^•Á&æ} Áä^Á~ •^á!æ•Áää [ æ&cäç^Á& { [ ] ]^} c•Á- [ !Áâ^ç^ [ [ ] ä} *Á~ } &cä [ } æ  - [ [ !á•Áâ~^Ác [ Ác@^á!Á@^æ c@Á] ! [ { [ cä} *Á~ } &cä [ ] •É |

G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]cÄÖ [ { ää)^äÄÜ^•^æ!&@Äæ}ä!Öçc^••ä [ }ÄCE} }~æjÄÜ^ [ !cÄ[-ÄCE&& { [ ]!•@ { ^}c•Äæ}ä!Ü^•~|c•

**Outcome #1**

**1. Outcome Measures**

▷ { ä^!Ä[-Ä]^ [ ]|^Ä , @ [ Äâ^ç^ [ ]|ÄæÄ] |æ}Äc [ Äâ { [ ]! [ ç^Äâ^æ!^Ä] |æ&cä&^•

▷ [cÄÜ^] [ !cä} \*Ä [ ] Äc@â•ÄU~c& [ { ^ÄT^æ•~|^

**Outcome #2**

**1. Outcome Measures**

▷ { ä^!Ä[-Ä]^ [ ]|^Ä , @ [ Ä^ç]æ}äÄ [ !Ä&@æ} \*^Äc@^ä!Ä] !^~!^} &^•Ä- [ !Ä [ !Äæccäc~ ä^•Äæä [ ~cÄ@^æ|c@^Ä- [ [ ä•

▷ [cÄÜ^] [ !cä} \*Ä [ ] Äc@â•ÄU~c& [ { ^ÄT^æ•~|^

**Outcome #3**

**1. Outcome Measures**

▷ { ä^!Ä[-Ä]^ [ ]|^Ä , @ [ Ä@æç^Äæ}Äâ} &!^æ•^ÄÄ] !^~!^} &^Ä- [ !ÄæcÄ|^æ•cÄ [ ]^Ä-!~äcÄ [ !Äç^•^æä|^È

▷ [cÄÜ^] [ !cä} \*Ä [ ] Äc@â•ÄU~c& [ { ^ÄT^æ•~|^

**Outcome #4**

**1. Outcome Measures**

▷ { ä^!Ä[-Ä]^ [ ~c@Ä [ !Äæä~|c•Ä , @ [ Ä•^|-Ä!^] [ !cÄæ}Äâ} &!^æ•^ÄÄ}Ä { æ•c^!^Ä [-Äc@^Ä|ä-^Ä•\ä||•ÄP^æ|c@^ÄŠä-^•c^|^

Ö@ [ ä&^•Äæ}ä!Ö^&ä•ä [ }ÄTæ\ä} \*È

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ ]

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄS [ ,|^ä\*^ÄU~c& [ { ^ÄT^æ•~|^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | î î    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

G€FFÁW)âç^!•âc^Á[-ÁX^! { [ ]c!Ô [ { ââ}^âáÜ^•^æ!&@kæ}â!Ôçc^}•â [ }ÁCE} } ~æ!áÜ^ [ !c![-ÁCE&& [ { ]!•@ { ^}c•kæ}â!Ü^•~|c•

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area                         |
|---------|--|
| Î€H     | Ɓ~c!âcâ [ }ÁÔâ~&æcâ [ }Áæ}â!Ó^@æçâ [ ! |

**Outcome #5**

**1. Outcome Measures**

Ɓ~ { â^!Ác@^Á)^ [ ]|^Ác@æcÁ•@ [ , Áæ}Áâ { ]! [ç^ { ^} c!â}Á@^æ|c@-|^Áæcâ} \*Á] !æ&câ&^•

**2. Associated Institution Types**

ÁF Î GÁÔçc^}•â [ }

**3a. Outcome Type:**

Ô@æ} \*^Áâ}ÁCE&câ [ }ÁU~c& [ { ^ÁT^æ•~|^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | ÎH€I   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Uâ^•âc^!Á!æc^•Áæ!^Á!â} \*ÉÁX^! { [ ]c!^ [ ~c@Áæ}â! [!â^!Áæâ~|c•ÉÁ^•]^&âæ||^Á [ , ^!Áâ} & [ { ^ÉÁâ [ Á] [ c! { ^c â!^æ!~Á \*~ââ^!â} ^•Á!^!æc^âÁc [ Á& [ } • { ]câ [ } Á [-Á-!~âc•Áæ}â!ç^•^cæâ|^•Ác@~•Áâ} &!^æ•â} \*Ác@^!Á!â•\•Á- [ ! &@! [ ] â&Áââ•^æ•^ÉÁÁV@ [ •^Á , âc@Á&@! [ ] â&Á@^æ|c@Á& [ ] â!câ [ ] •Á•~&@Áæ•Áââæâ^c^•Á { ~•c!âæ} &^Áâ!^cÉ æ&c!çâc~Áæ} â! { ^â!æcâ [ ] •Ác [ Á { æâ} cæâ} Á@^æ|c@É

**What has been done**

Û|^&â-â&Á]! [ \*!æ { { â} \*Á , æ•Ácæ! \*^c^âÉÁâ^!âç^!^âÉÁæ}â!^çæ|æc^ââ- [ !Á^æ&@Áæ~ââ^} &^ÉÁÁCE [ { [ •c!F€€€ [ [ , Áâ} & [ { ^Á•^} â [ !^Áæ} â!Áââ•æâ|^âÁæâ~|c•Á , ^!^Á]! [ ç!âââ-!^•@Á]! [ â~^Áæ}â!^&â}^Á&æ!â•Á- [ !Áæ} æç^!æ\*^Á [-ÁJÁ , ^!^•ÉÁU!^•&@ [ [ |Ác [ Á \*!æâ^ÁGÁ~ [ ~c@ÉÁ [ ç^!Á!É€€Á] æ!c!â&â]æc^â!â}ÁæÁ}æcâ [ ] æ|Á} ~c!âcâ [ ] &~!|â&~ [ { ÁÔ [ ] âÉÁÔ~|c~!^Áæ}â!U^æââ} \*ÁçØÖÜDÁæ}â!Ác@^Á^â~&æc [ !•Á~•â} \*ÁÔÖÜÁ]æ!c!â&â]æc^â!â}ÁæÁ [ [ • ]! [ \*!æ { Á•~!ç^!ÉÁÔæâ^c^•Á^â~&æcâ [ } Á , æ•Áâ^!ç^!^â!ç!æÁFFÁX^! { [ ]c!â}c^!æ&c!ç^ÁV^!^ç!â [ ] Á•âc^•æ}â!^ç}æ}â!âÁc [ Á&æ!^•âç^!•É

**Results**

C€c!c@^Á^}âÉ [-É•^æ• [ ] Á Î Ì ÁÁ [-Ác@^Á]æ!c!â&â]æcâ} \*Á•^}â [ !•Áâ}â!â&æc^â!c@æc!c@^Á]! [ \*!æ { Á@^!|^â!c@^ { Ác [ ^æc!c@^Á!^& [ { { ^} â^â!æ { [ ~}c•Á [-Á-!~âc•Áæ}â!ç^•^cæâ|^•Áæ}â!GÁÁ•æââ!âc!^!|^â!c@^ { Á•cæ^Á@^æ|c@^É V@^ÁÔÖÜÁ•~!ç^!^Á•@ [ , ^â!c@æc!JJÁÁ [-Ác@^Á~ [ ~c@Á , [ ~|â!c!~Á}^ , Á- [ [ â•Áæ}â! Ì ÁÁ , [ ~|â!^!^&c!æ

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ}ä!Öçc^•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•Äæ}ä!Ü^•~|c•

@^æ|c@^Ä- [ [ äÄ-Ä\*äç^ }Äc@^Ä&@ [ ä&^ÉÄÄCEÄc@^ÄÄÄ { [ ]c@Ä [ [ •cÄÖäæà^c^•Ä^Ä~&æcä [ ]Ä&|æ•••ÉÄFJÄ [-Äc@^ÄFJ  
ä} ää&æc [ !•Ä•@ [ ^ÄÄ\*ä\* }ä-ä&æ}cÄ [ [ •äcç^Ä&@æ } \*^ÉÄÄCEä [ ]cä } \*Ä@^æ|c@ä^!Ä|ä-^•c^ |^•Ä!^Ä~&^•Ä@^æ|c@Ä&æ!^  
& [ •c•ÉÄÄÖç^!^ÄÄFÄä }ç^•c^Ää}Ä [ ^c]æcä^ }cÄ^ä~&æcä [ ]Ä&æ}Ä&~cÄ@^æ|c@Ä&æ!^Ä& [ •c•Ää^Ä~ ]Äc [ ÄÄ |É |É

4. Associated Knowledge Areas

| KA Code | Knowledge Area                                   |
|---------|--|
| Ï€H     | ▷~c!äcä [ ]ÄÖä~&æcä [ ]Äæ} äÄÖ^@æçä [ !          |
| Ï€I     | ▷~c!äcä [ ]Äæ} äÄP~ } *^!Ää }Äc@^ÄÜ [ ]~ æcä [ } |

Outcome #6

1. Outcome Measures

Öçæ|~æcä } \*Äc@^Äæ&&^ ]cæ } &^Ä [-Ä!^~ [ ! { ~|æc^äÄ [-Ä!^~ [ ! { ~|æc^äÄ-|æç [ !^äÄ { ä|\Ää}Ä•&@ [ [ ]•

2. Associated Institution Types

ÄF!ÄGÄÜ^•^æ!&@

3a. Outcome Type:

Ö@æ} \*^Ää}ÄS} [ , |^ä\*^ÄÜ~c& [ { ^ÄT^æ~^!^

3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| G€FF | GÍ     |

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

V@^Ä [ !|b^cÄ^çæ|~æc^•Ä@ [ , Ä&@ä|ä!^}Äæ&&^]cÄ-|æç [ !^äÄ { ä|\Ä!^~ [ ! { ~|æc^äÄ [ { ^ÄcÄc@^ÄCE||äæ } &^Ä- [ !Äæ  
P^æ|c@ä^!ÄÖ^ } ^!æcä [ ]ÄçEPÖDÄ•cæ } äæ!äÄ [-Ä] [Ä { [ !^Äc@æ }ÄF!€Ä&æ [ !ä^•Ä] ^!Ä^•^!çä } \*É

What has been done

W•^äÄ { ä|\Ä•æ|^Äæ•ÄæÄ} [ !ç^Ä- [ !Ä { ä|\Ä& [ ]•~ [ ]cä [ ]Äæ } äÄPæcä [ ]æ|ÄÜ&@ [ [ |ÄS~ } &@ÄÜ! [ \*!æ { ÄçPÜŠÜD  
]æ!cä&ä}æcä [ ]Ä!æc^•Äæ•ÄæÄ} [ !ç^Ä { ^æ~^!Ä- [ !Ä•&@ [ [ |Ä&@ä|ä!^}c•Äæ&&^]cæ } &^Ä [-Äc@^Ä&@ [ [ |•cÄ { ^æ|  
] [ ! \*!æ { •ÉÄÄæ•æ } ]|^Ä [-ÄP [ !c@^æc^!}Äæ } äÄÜ [ ~c@^æc^!}Ä•&@ [ [ |•Ä [ ~^!ä } \*Ä!^~ [ ! { ~|æc^äÄ [ , ^!Ä&æ [ !ä^  
-|æç [ !^äÄ { ä|\Äæ!^Ää^ }cä-ä^äÄæ [ ] \*Ä , äc@Äc@^Ä { ä|\Ä} [ &^•• [ !•Ä•~ ] ]|^ä } \*Äc@ [ •^Ä•&@ [ [ ]•É

Results

V@^Ä [ ]æc^Ä , æc^Ä [ !cä [ ]Ä [-Äc@^Äc~ä^Ä- [ ]äÄ} [ Ä•ä\* }ä-ä&æ}cÄä~^!^ } &^Ää}Ä& [ ]•~ [ ]cä [ ]ÉÄ@ [ , ^ç^!Äc@^  
-|æç [ !^äÄ { ä|\Ä•Ä { ^Äcä } \*Äc@^ÄCEPÖÄ•cæ } äæ!ä•ÉÄääÄÄ} [ cÄ { ^ÄcÄc@^ÄÄ~!^!^ }cÄWÜÖCEÄ] [ ! [ ]•^äÄ!~|ÄÉ  
CEääcä [ ]æ|~ÉÄ , @ä|^Äc@^!^Ä , æ•ÄæÄä^&|ä}^Ää}ÄPÜŠÜÄ}æ!cä&ä}æcä [ ]Ä!æc^•Ä , @^}Ä| [ , ^!Ä&æ [ !ä^Ä { ä|\Ä , ^!^  
ä}c! [ ä~&äÉÄc@^!^Ä , æ•Ä•ä\* }ä-ä&æ}cÄ!^& [ ç^!^Ä [ ç^!^Äcä { ^ÉÄV@^•^Ä-ä} ää } \*Ä@æç^Ä|^ÄÄc [ Äæ } Äæääcä [ ]æ|  
] [ !b^cÄcÄ [-Ä [ ] [ , ÄæÄ } } { ä^!Ä [-Ä•&@ [ [ |Ää!c!ä&c•Ää}Äc@^Ä} [ !c@^æc^!}Ä• [ ~c@^!}Ä!^•\*ä [ ]•Ä [-Äc@^Ä& [ ~]c!^É  
!^!^•^}cä } \*ÄæÄ!æ&äæ|^Ääç^!^ÄÄ\*! [ ~ ]Ä [-Äc~ä^}c•ÉÄæ•Ä , ^|Äæ•Äc@^Äc , [ Ä]ä [ cÄ•&@ [ [ |•Ää}ÄX^! [ [ ]cÉÄæ•  
c@^ÄÄ& [ { ^Ää}c [ Ä& [ { ]|äæ } &^Ä , äc@Äc@^ÄWÜÖCEÄ] [ [ ]•^äÄ!~|Äæ } äÄQU TÄ& [ { ]^cäcç^Äà^ç^!æ\*^Ä

G€FFÁW}áç^!•ic^Á[-ÁX^! { [ ]}cÁÔ [ { áá}^ááÜ^•^æ!&@Áæ}ááÔçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& { }]|á•@ { ^}c•Áæ}ááÜ^•~|c•  
 !^& [ { { ^}áæcá [ ]}•É

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area                         |
|---------|--|
| Ï€H     | Ɔ~c!áçá [ }ÁÔá~&æcá [ }Áæ}ááÓ^@æçá [ ! |

**Outcome #7**

**1. Outcome Measures**

Ó~!}Áæ}áá^æ!}KÁQ}&^}cáçá:á} \*Á]@^•á&æ|Áæ&cáçáç^Áá}Á& [||^\*^Á-!^•@ { æ}

**2. Associated Institution Types**

ÁFÌ ÎGÁÜ^•^æ!&@

**3a. Outcome Type:**

Ô@æ} \*^Áá}ÁS} [ , |^á\*^ÁU~c& [ { ^ÁT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | F€€    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ú@^•á&æ|Áæ&cáçáç^Á@æ•Áá^}Ááá^}cá-á^ááæ•Áæ}Áá { } [ !cæ}cÁá^@æçá [ !Áç [ Á@^] Á] !^ç^}cÁç@^Áá^ç^ [ ] { ^}cÁ [-  
 [

GEFFAW)äç^!•ic^Á[ÁX^! { [ ]clÔ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^••ä [ÁCE)}~æ!áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•kæ}á!Ü^•~|c•

**Outcome #8**

**1. Outcome Measures**

Ú!^äá [ cã&•Áæ}á! ]! [ ää [ cã&•Á&æ}Áà^Á~•^äÁæ•Áäâ [ æ&cãç^Á& [ { ] [ ]^}c•Á- [ !ÁÁ^ç^| [ ]ä} \*Á~ }&cã [ }æ!Á- [ [ ä•Áá~^ c [ Ác@^á!Á@^æ|c@Á ]! [ { cã} \*Á~ }&cã [ ]•É

**2. Associated Institution Types**

ÁFÌ ÎGÁÜ^•^æ!&@

**3a. Outcome Type:**

Ô@æ} \*^Áä}ÁS} [ , |^ä \*^ÁU~c& [ { ^ÁT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| GEFF | F€€€   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Šæ&cã&Áæ&äááæ&c^!äæÁçSCEÓDáæ!^Ác@^Á { [ •cÁ& [ { { [ ]Ác^ ]^Á [-Á { ä&! [ à^•Á~•^äÁæ•Á ]! [ ää [ cã&•ÉÁV@^Á@æç^ à^~}Á~•^áÁä}Ác@^Á- [ [ ä!á}á~•c!^Á- [ !Á { æ}^Á^~æ!•ÉÁP [ , ^ç^!ÉÁc@^•^Áà^}^~ä&äæ!Á [ ! \*æ}ä• { •Á [-c^} ^}& [ ~}c^!Á { æ}^Á@æ!•@Á& [ ] ä!cã [ ]•Á~&@Áæ•Áæ&ä!ÉÁæ|\æ!äÉÁ@^æcÁæ} ä!•æ|c!^••^•Áá~!ä} \*Á- [ [ ä ]! [ &^••ä} \*É

**What has been done**

V@ä!Á ]! [ b^&cÁá^ç^ [ ] ^ááæ!^ , Á ]!æ&cã&æ!Ác^&@} [ [ [ \*^Á~•ä} \*Á ] [ |^ { ^!ä : ^á! , @^Á ]! [ c^!ä}Áàæ•^á { ä&! [ &æ}•~|æcã [ ]Ác [ Áä { ]! [ ç^Á~!ç!çæä!äc^Á [-Á ]! [ ää [ cã&Áæ&c [ äæ&á|!á!ä}Á- [ [ ä!Á~•c^ { •É

**Results**

V@^Á!^•~|c•Á•@ [ , ^áÁc@æcÁc@ä•Á , @^Á ]! [ c^!ä}Áàæ•^á { ä&! [ ^} &æ}•~|æcã [ ]Ác^&@} [ [ [ \*^Áá•Áæ}Á~•^&cãç^ æ}á!Á& [ ] [ { ä&æ!Á { ^c@ [ ä!á& [ { ]æ!^á! , äc@Á ] [ |^•æ&&@!ä!á!áæ•^á { ^c@ [ ä!Ác [ Áä { ]! [ ç^Ác@^Á~æ!äc^Á [-^! { ^}c^!á!áæ!^Á- [ [ ä•ÉÁÓ^&æ~•^Á [-Á , @^~!ä!•Áæ!á^Á ]! [ ä~&cÁ [-Á&@^•^Á { æ\ä} \*ÉÁc@ä•Á}^ , Ác^&@} [ [ [ \*^ { æ^Áà^Á~!c@^!Ác [ Áà^}^~äcÁc@^Á , ^||Áà^!ä} \*Á [-Á& [ ]•~ { ^!•ÉÁc@^Á!áæ!^!á}á~•c!^ÉÁæ}á! ]! [ c^&cÁc@^ ^}ç! [ ] { ^}cÁ [-Ác@^Á•cæc^Á [-ÁX^! { [ ]c!æ}á!áà^ [ ]áÉ

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area   |
|---------|--|
| Í€F     | Þ^ , Áæ}á!ÁQ { ]! [ ç^!á!áQ [ [ ä!ÁÚ! [ &^••ä} *ÁV^&@} [ [ [ *^á^• |
| Ï€F     | Þ~c!á^}c!ÁÔ [ { ] [ •cã [ ]Á [-ÁQ [ [ ä                            |





G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} } ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•hæ}ä!Ü^•~|c•

and/or vegetables?"), it is unclear whether older adults actually achieved the fruit and vegetable consumption goals as recommended in the Dietary Guidelines for Americans, or were more able to make progress towards meeting the goals.

---

GEFFAW}äç^!•ic^Ä[-ÄX^! { [ ] cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ} äÄÖ! }•ä [ }ÄCE} } ~æ|ÄÜ^ [ [ :cÄ [-ÄCE&& [ { } ] ä•@ { ^ } c•Äæ} äÄÜ^•~|c•

likely preferable to older adults.

A written survey was conducted with 632 school children aged 9-13 in 12 Vermont schools that have **Farm to School programs** to better understand the relationship between various environmental, personal and behavioral factors and the student's reported consumption of fruits and vegetables. The purpose of this work was to identify what factors showed the strongest correlation to adequate consumption of fruits and vegetables so that future Farm to School efforts could successfully target these factors.

It is our hope that the results of this research will provide Farm to School practitioners with better ideas about how to improve fruit and vegetable consumption in school children. For example, the research suggests that encouraging children to try new fruits and vegetables and building their confidence about their ability to do so could improve children's chance of meeting the Dietary Guidelines for Americans in relation to produce consumption. Parental modeling and positive facilitation of their children's eating behaviors related to fruits and vegetables also appears to be relevant.

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]}clÖ [ { ää}^äáÜ^•^æ!&@äæ}ä!Öçc^••ä [ }ÄCE} }~æ|ÄÜ^ [ [!cÄ[-ÄCE&& { [ ]}i•@ { ^}c•äæ}ä!Ü^•~|c•

**V(A). Planned Program (Summary)**

**Program # 2**

**1. Name of the Planned Program**

Ö [ { { ~ } äc^ÄÖ^ç^! [ [ ] { ^ } cÄæ} ä!c@^ÄÜ^!• [ ]æ|Äæ} ä!ÄQ} c^||^&c~æ|ÄÖ^ç^! [ [ ] { ^ } cÄ [-ÄY [ ~c@Äæ} ä!ÄCEä~|c•

**V(B). Program Knowledge Area(s)**

F€ÄÜ! [ \*!æ { ÄS} [ , |^ä^•^ÄCE!^æ•Äæ} ä!Ü^!&^} cæ\*^

| KA Code | Knowledge Area  | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---|-----------------|-----------------|----------------|----------------|
| FGI     | Wi:äæ}ÄØ [ !^•c!^   | I Ä             |                 | €Ä             |                |
| î€i     | Ö [ { { ~ } äc^ÄÜ^• [ ~!&^ÄÜ æ} }ä} *Äæ} ä<br>Ö^ç^! [ [ ] { ^ } c   | F i Ä           |                 | €Ä             |                |
| ïGH     | Pæ:æ!ä•äc [ ÄP~ { æ} ÄP^æ c@Äæ} ä!Üæ~^c^                            | ï Ä             |                 | €Ä             |                |
| ì€G     | P~ { æ} ÄO^ç^! [ [ ] { ^ } cÄæ} ä!ÄØæ { ä ~AY^  E<br>Ó^ä} *         | F€Ä             |                 | €Ä             |                |
| ì€i     | Ö [ { { ~ } äc^ÄQ} •cäc~cä [ ] •ÉAP^æ c@ÉÄæ} ä!Ü [ &äæ <br>Ü^!cä&^• | F i Ä           |                 | €Ä             |                |
| ì€î     | Y [ ~c@ÄÖ^ç^! [ [ ] { ^ } c   | I i Ä           |                 | €Ä             |                |
|         | <b>Total</b>  | F€€Ä            |                 | €Ä             |                |

**V(C). Planned Program (Inputs)**

**1. Actual amount of FTE/SYs expended this Program**

| Year: 2011                 | Extension |      | Research |      |
|----------------------------|-----------|------|----------|------|
|                            | 1862      | 1890 | 1862     | 1890 |
| Ü æ}                       | G î ÈH    | €€€  | €€€      | €€€  |
| CE&c~æ ÄÜæä!Ü! [-^••ä [ ]æ | G i ÈI    | €€€  | €€€      | €€€  |
| CE&c~æ ÄX [   ~ } c^Ä!     | F È F     | €€€  | €€€      | €€€  |

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

GEFFAW)äç^!•äc^Á[ÁX^! { [ ] çÖ [ { ää}^äÜ^•^æ!&@äæ}ä!Öçc^•ä [ ACE) } ~æ|äÜ^ [ !ç[-ÁCE&& [ { ]!•@ { ^}c•äæ}ä!Ü^•~|c•

## V(D). Planned Program (Activity)

### 1. Brief description of the Activity

AAAAAAAA

AAAAAAAA~!ÉPÁÚ[•äç^ÁY[~c@ÁÖ^ç^! [ [ ] { ^}çÁÚ! [ \*!æ { KÁP^} ] Á^ [ ~c@Áæ&~ä!^ÁŠä-^ÁÜ\ä|!•ä} Äc@^Á- [ ] [ , ä } \*Áæ!^æ•K  
Ö^&ä [ ] Á T æ \ ä } \*LÁÖ!äcä&æ|ÁV@ä} \ ä } \*LÁÚ! [ à|^ { ÈÜ [ |çä } \*LÁÖ [ { { } ä&æcä [ ] LÁÖ [ æ|ÈÜ^ccä } \*LÁæ } äÁÜ\ä|!•Á- [ !  
Öç^!^äæ^ÁŠçä } \*Äc [ Á•~&^&^äæ•Áæä~|c•ÉÁÖ^|çç^!^Á T^c@ [ ä•KÁÎÉ!Á•^~^ } çäæ|Á|æ! } ä } \*Ä@ [ ~!•Á~•ä } \*Á^ç } ^!ä^ } çäæ|  
|æ! } ä } \*Äc^&@} ä~^•Á- [ !Ää } ÉÁ•&@ [ [ !ÉÄæ-c^!•&@ [ [ !ÉÄ [ !Á [ ~cÈ [-È•&@ [ [ !Á•ccä } \*É

U ] ^!æcä [ ] Á T ä|äçæ!^ÁŠä•ÄÇUTSDÁÁÄ^çä•c•Äc [ Á^ä~&æc^ÁX^! { [ ] çÁ [ { { } äcä^•Á [ ] Äc@^Á~ } ä~^Á^ç } ^!ä^ } &^•Áæ } ä  
&@æ|^ } \*^•Á [-Á { ä|äçæ!^Á|ä-^Áæ } äÄc•Ää { ] æ&cÄ [ ] Á-æ { ä|ä^•ÉÄ , @ä|^Á | ! çää } \*Á [ ] •äçç^Á [ ] [ !c~ } äcä^•Á- [ !Á^ [ ~cÉÄÄ  
Ready, Set, Go! Operation: Military Kids Vermont OMK-VT aims to establish community partnerships that will connect and educate people by: Creating community support, delivering opportunities to youth and families, supporting military kids, collaborating with community partners, educating the public, including the education community, and incorporating military families into existing community resources.

AAAAAAAA

~ÜÈÒÈVÉÁCE&cäçä^•KÁ!ÉPÁÜÒVÁ, ä|!ä^\*ä} Äc [ Á•@ [ , Á@ [ , Á•&ä^ } &^Áæ } äÁ^ } \*ä } ^!ä } \*Ää••~^•Áæ-^&cÄ^ [ ~c@•Ä|äç^•Áæ } ä  
] !^ } æ!^Áæ~^c~!^Á\*^ } ^!æcä [ ] Á [-Á•&ä^ } çä•c•Áæ } äÁ^ } \*ä } ^!•ÉÁV@^Á!ÉPÁÜÒVÁ! [ \*!æ { Á , ä|!Á ] !^•^ } çÁ!ÉPÁ , äc@ÁæÄ } ^ ,  
[ ] [ !c~ } äc^Äc [ Á& [ ] } ^&cÄc [ Äc@^ÁŠÖWC•ÁÜÒVÁ!^•æ!&@Á& [ { { } äc^Áæ } äÄä } c^!æc^Á , äc@Á&~!^ } çÁ [ ~c@Ä , [ !\ - [ !&^  
ä^ç^! [ ] { ^ } çä } äcäæcäç^•È

Á~Tæ! \^cÁCE} æ|^•ä•ÉÄ } ^^ä•ÁCE•••• { ^ } çÁæ } äÁÜc!æc^\*ä&ÁÚæ } ä } \*KÁV@ä•Á! [ \*!æ { Á ] ! [ çää^•Äc@^Á& [ { { } äc^Á , äc@  
æ } æ|^cä&æ|Äc^&@} ä~^•Ác@æcÄ&æ } Äà^Á ] ~cÄc [ Á , [ ! Ää { { ^äæc^!^Ää } Á^& [ ] [ { ä&Á!^çäçæ|ä : æcä [ ] Á^~ [ !c•ÉÁV@^Á ] ! [ &^••



GEFFAW]āç!•āc~Á[~ÁX^! { [ ] }c!Ö [ { äi }^ä!Ü^•^æ!&@kæ }ä!Öçc^•ä [ }ACE ) }~æ!Ü^ [ !c![-ÁCE&& { [ ]!•@ { ^ }c•kæ }ä!Ü^•~|c•

ÁÁÁÁ~ÁÁCE\*!i&~|c~!^KÁÚ! [ ä~&^ÁÖ! [ , ^!•  
ÁÁÁÁ~ÁÁCE\*!i&~|c~!^KÁÚ!çä&^ÁÚ! [ çä!ä!•  
ÁÁÁÁ~ÁÁCE\*!i&~|c~!^KÁÚ { æ||ÁØ!~äc!BAX^~^cæà|ÁÖ! [ , ^!•  
ÁÁÁÁ~ÁÁCE\*!i&~|c~!^KÖæ!~ÁÖ [ æcÉ T ^æcÁÖ [ æc!kæ } ä!Öæ!~ÁÚ@^^]ÁÚ! [ ä~&^!•  
ÁÁÁÁ~ÁÁCE\*!i&~|c~!^KÖ [ ç!^! } { ^ }c!CE\*^ } &~ÁÚ!• [ ] }^|  
ÁÁÁÁ~ÁÁÖ [ { { ~ } äc!^•KÁÖäc!^•kæ } ä!ÁV [ , }•  
ÁÁÁÁ~ÁÁÖ [ { { ~ } äc!^•KÁÖ [ { { ~ } } äc~ÁCE&c! [ } ÁCE\*^ } &ä!•  
ÁÁÁÁ~ÁÁÖ [ { { ~ } äc!^•KÁÖ ä~&æc [ !]•  
ÁÁÁÁ~ÁÁÖ [ { { ~ } äc!^•KÁÖ [ &æ!|ÁU--ä&äæ!•DŠ^æä!•  
ÁÁÁÁ~ÁÁÖ [ { { ~ } äc!^•KÁÖ [ ] EÖ [ ç!^! } { ^ }cæ!|ÁU!~\*æ } ä : æc! [ ]•  
ÁÁÁÁ~ÁÁÖ [ { { ~ } äc!^•KÁÖ &@ [ ]!•  
ÁÁÁÁ~ÁÁÖ [ { { ~ } äc^!|~æä!•^kæ } ä!ä&äc! : ^ }•  
ÁÁÁÁ~ÁÁÖPQCEA~ ] ^!ç!ä! [ !]•  
ÁÁÁÁ~ÁÁÖçc^ }•ä [ ] KÁCEäç!• [ !]•  
ÁÁÁÁ~ÁÁÖçc^ }•ä [ ] KÁÖæ&~|c~DÜcæ--  
ÁÁÁÁ~ÁÁÖ [ !^•c!~KÁÖæ } ä•&æ } ^ÁQ } ä~•c!~  
ÁÁÁÁ~ÁÁÖ [ !^•c!~KÁÖ [ \*~^!•  
ÁÁÁÁ~ÁÁÖ [ !^•c!~KÁÖ Y [ [ ä!ÁÚ! [ &^•• [ !]•  
ÁÁÁÁ~ÁÁ T ä \*!æ } c!Q } ÁÚ&@ [ [ |ÁY [ ~c@  
ÁÁÁÁ~ÁÁ T ä \*!æ } c!U~c! [-ÁÚ&@ [ [ |ÁY [ ~c@  
ÁÁÁÁ~ÁÁ T ä |äcæ!~Á-æ } ä!j!•  
ÁÁÁÁ~ÁÁ T ä |äcæ!~Á^ [ ~c@  
ÁÁÁÁ~ÁÁ Ú [ |ä&^Á T æ!^!•KÁÖ^\*ä!|æc [ !]•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁCEä~|c!Öæ!~^äç!•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁCE\*^ÁFÉ!ÁÇÚ!^•&@ [ [ |!^!•D  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁCE\*^ÁÍÉ  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ [ |!^\*^ÁÚc~ä! }c•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖæ { ä!j!•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖæ { ä!j!•^, äc@ÁÖä { äc!ä!Ü^• [ ~!&^•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ^ } ^!æ|  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ P [ { ^ [ , } ^!•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ P [ ] ]! [-äc!ÁU!~\*æ } ä : æc! [ ]•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖæ!^ }c•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ^ [ ] |^Á, äc@ÁÖä { äc!ä!Ü^• [ ~!&^•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ { æ||ÁÖ~•ä } ^••ÁU, } ^!•DÖ } c!^! ] ^!•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ X [ ] ]^!•  
ÁÁÁÁ~ÁÁ Ú ~ä!j&KÁÖ X V Á U W S Á V! ^ ^ Á Ú c^, æ!ä!  
ÁÁÁÁ~ÁÁ Ú &@ [ [ |ÁÖ!æ!KÁÖÉ!  
ÁÁÁÁ~ÁÁ V!æ! } Éc@^ÉV!æ! } ^!Á!^&ä ] ä! }c•Kæä~|c•  
ÁÁÁÁ~ÁÁ Y [ ~c@

3. How was eXtension used?

ÁÁÁÁÁÁÁÁ

ÁÁÁÁ~ÁÁQÁ@æç!ÁÄ!j!~^ä!Äc@^Á-æ&^à [ [ \ Á [-Ác@^Á { ä!äcæ!~Á } ^c, [ !\Á [-Á-æ { ä!j!•^ÁÉÁ\*!^æc!æ!c!&|^Áæ } ä!^•^æ!&@Áæ } ä!@æç!^  
|ä } \ ä!äc!c [ Ác@^Á U T S Á ] æ\*^Áæ } ä!ÉPÁ ] æ\*^  
ÁÁÁÁ~ÁÁQÁæcc^ { [ ]c!äc [ Á~•^Á^Yc^ }•ä [ ] Áæ ] ]! [ ç! { æc!^Á@æ!~Áæ!ä! [ : ^ } Äc! { ^•^ä } Äc@^Á ] æc!c!^æ!É! [ [ \ ä ] \*Äc [ Á ] [ &æc!  
!^• [ ~!&^•Á!|~æc! } \*Äc [ Á, [ !\ - [ !&^Á!äç!^ [ ] { ^ }cÉ!æ\*!i&~|c~!æ!|Á&æ!^!Á!ä~&æc! [ ] É!æ } ä!•&@ [ [ |Á\*æ!ä! } ä ] \*É!Q } Á!ç!^!  
&æ!^ÁQ!~\*æç!^ ] Áæ } ä! , ^ }c!ä&æ\Äc [ Á\* [ \*!j! } \*Á!ä&æ~•^ÁQ! , æ!~ } æ!|Äc [ Á ] [ &æc!^æ ] ]! [ ]!äc!^Á!^• [ ~!&^•ÁÉÉÁ } [ c  
•~!^Á!~Äc@æc! , æ!ä!ä&æ~•^Äc@^Á , ^!^ }c!c! [ ] Á!YcÉ! [ !ä!&æ~•^Äc@^Á }c!~æ!^Á!•Á [ Á ] [ !|~Á!ä!~\* } ^ä!Öæç!æc!KÁQ  
& [ ]•ä!^!Á { ^•^!~Áç!^!^Á, ^ä!äc!^æc!^æ } ä!c!&@É-!j! } ä!~É!æ } ä!@æç!^Á [ { ^!^ç!^!j!^ } &^Á, äc@Á~•ä } \*Äc@^Á, ä!j!~! [ ! { æcÉ

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@kæ}ä!Öçc^}•ä [ }ÄCE} } ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ}ä!Ü^•~|c•

GEFFAW}äç^!•ic^![-AX^! { [ ]clÔ [ { ää}^äÜ^•^æ!&@kæ}ä!Öcc^}•ä [ }ACE)}~æ|Ü^ [ !c[-ACE&& [ { ]!•@ { ^}c•kæ}ä!Ü^•~|c•

CE&c~æ|K €

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2011   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Actual | €         | €        | €     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

IËPÁCE-c^!•&@ [ [ ]

**Year**                      **Actual**  
G€FF                              GF

**Output #2**

**Output Measure**

IËPÁÔ|~à

**Year**                      **Actual**  
G€FF                              FHG

**Output #3**

**Output Measure**

IËPÁÖæ^ÁÔæ { }

**Year**                      **Actual**  
G€FF                              Fî

**Output #4**

**Output Measure**

IËPÁUç^!}â\* @c^&æ { }

**Year**                      **Actual**  
G€FF                              î



G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@kæ)ä!Öçc^}•ä [ }ÄCE)} ~æ|ÄÜ^] [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ)ä!Ü^•~|c•

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}c!Ö [ { ää}^äáÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE)}~æ|ÄÜ^ [ !cÄ[-ÄCE&& { }]|ä•@ { ^}c•hæ}ä!Ü^•~|c•

**Output #11**

**Output Measure**

Øä^|ä!•äc^Äçä•äc

| Year | Actual |
|------|--------|
| G€FF | FGIG   |

**Output #12**

**Output Measure**

Ø~}äâ} \*Ä!^~^•c

| Year | Actual |
|------|--------|
| G€FF | F      |

**Output #13**

**Output Measure**

Ú!^•^} cæcä [ ]•

| Year | Actual |
|------|--------|
| G€FF | ÏJ     |

**Output #14**

**Output Measure**

Ú~ à|ä&æcä [ ] ÄÄ~æ&cÄ•@^^c

| Year | Actual |
|------|--------|
| G€FF | Ï      |

**Output #15**

**Output Measure**

Ú~ à|ä&æcä [ ] ÄÄ}^ , •|^cc^!

| Year | Actual         |
|------|----------------|
| G€FF | Î ÍU~c]~cÄ ÄFÍ |

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]clÖ [ { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]i•@ { ^}c•hæ}ä!Ü^•~|c•

**Output #17**

**Output Measure**

Üæäâ [ ÄÜ ] [ c•D ] ! [ \* !æ { ÄÇ^â ~ &æcä [ ]æ|  
P [ cÄ!^ ] [ !cä } \* Ä [ ] Äc@â•ÄU~c ] ~cÄ- [ !Äc@â•ÄCE} } ~æ|ÄÜ^ [ !c

**Output #18**

**Output Measure**

VXÄ•^\* { ^ } cBCEVØ

|             |               |
|-------------|---------------|
| <b>Year</b> | <b>Actual</b> |
| G€FF        | F€            |

**Output #19**

**Output Measure**

V!æä}Äc@^ÄV!æä}^!Ä•^••ä [ ]•

|             |               |
|-------------|---------------|
| <b>Year</b> | <b>Actual</b> |
| G€FF        | J             |

**Output #20**

**Output Measure**

Y^àÄÜæ\*^  
P [ cÄ!^ ] [ !cä } \* Ä [ ] Äc@â•ÄU~c ] ~cÄ- [ !Äc@â•ÄCE} } ~æ|ÄÜ^ [ !c

**Output #21**

**Output Measure**

Y [ !\•@ [ ] ÄËÄ•^!ä^•  
P [ cÄ!^ ] [ !cä } \* Ä [ ] Äc@â•ÄU~c ] ~cÄ- [ !Äc@â•ÄCE} } ~æ|ÄÜ^ [ !c

**Output #22**

**Output Measure**

Y [ !\•@ [ ] ÄËÄ•ä } \*|^Ä•^••ä [ ]

|             |               |
|-------------|---------------|
| <b>Year</b> | <b>Actual</b> |
| G€FF        | ÎH            |

**Output #23**

**Output Measure**

V!æä}^^Äâ^|äç^!^ÄÄ! [ \* !æ { { ä } \*

|             |               |
|-------------|---------------|
| <b>Year</b> | <b>Actual</b> |
|-------------|---------------|

G€FFÄW)äç^!•ic^Á[-ÁX^! { [ ]}clÔ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^}•ä [ }ÁCE)}~æ|ÁÜ^] [!cl[-ÁCE&& [ { ]}|ä•@ { ^}c•hæ}á!Ü^•~|c•

G€FF

FFH

**Output #24**

**Output Measure**

Öä•]|æ^Á[!Á^ç@iäâc

**Year**

**Actual**

G€FF

í ï

**Output #25**

**Output Measure**

Ô~!|ä&~|~ {

**Year**

**Actual**

G€FF

l

V(G). State Defined Outcomes

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME   |
|--------|--|
| F      | Q}&!^æ•^Á} ~ { à^!Á[-Á& [ { { ~ } äc^•Á^•cæà!ä•@ä } *Á [ !Á^ç } æ } ää } *Á& [ { { ~ } äc^•Ác!^•^Á ] ! [ *!æ {   |
| G      | ä}&!^æ•^Á} ~ { à^!Á[-Á-æ! { Áæ } ä!~!æ!^•ä^ } c•Á , äc@Áä!•æä!äc^•Á••~&^•••~  ^•^!ç^•äÁç^•Á&æ•^Áä•& [ !•^•äDÄ , @ä&@Áä•Áä^•-ä } ^äÁæ•Á@æçä } *Áä } &!^æ•^Áä•æcä•-æ&cä [ ] } Á , äc@Áæ&c~æ!Á [ !Á ] [ c^• } cäæ!Á^ { ] [ ^ { ^ } cæ } äÄ { æä } cæä } ^äÁ [ !Á } &!^æ•^Áä } & [ { ^ |
| H      | Q}&!^æ•^Á} ~ { à^!Á[-Á!ÉPÁ•cæ~•Á•^!-É!^! [ !cä } *Áæ } Áä } &!^æ•^Áä } Äc@^•ä!Áæä!äc^•Ác [ Á , [ !\Á , äc@Á^ [ ~c@Áæ } äæä~  c•Ác [ Áä { ] [ ^ } cÄ!ÉPÁ!ä-^•\ä  Áä^ç^! [ ] { ^ } cÄ [ ] [ !c~ } äc^•   |
| I      | Þ~ { à^!Á[-ÁTä*!æ } cÄÖä~&æcä [ ] Á^!ä*äà!^Á•c~ä^ } c•Á^! [ !  ^ä  |
| Í      | Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Á]! [ !*!æ { Á } æ!cä&ä } æ } c•Á•^!çä } *Áæ•Á!^æä^!•Á [ ] ÁÖ [ { { äcc^•   |
| î      | Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Áç [ ] ~ } c^•!•Á•^!-Á!^! [ !cä } *Áæ } Áä } &!^æ•^Áä } Äc@^•ä!Áæä!äc^•Ác [ Áä { ] [ ^ { ^ } cÄæÄ!ÉPÁ!ä-^•\ä  Áä^ç^! [ ] { ^ } cÄ- [ !Á^ [ ~c@  |
| ï      | Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Á^ [ ~c@Á , @ [ Á•^cæ } ä!Á!^æ&@Á* [ æ!•Áä^ } cä-ä^äæcÄc@^Áä^*ä } } ä } *Á [-Ác@^Á!ÉP^•æ!   |
| ì      | Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Á&   ä•hÄ [ ä } *ÁæcÄ!^æ•cÄ!Á@ [ ~!•Á [-Á& [ { { ~ } äc^•Á•^!çä&^   |
| J      | ä}&!^æ•^Á} ~ { à^!Á[-Á^ [ ~c@Á!^æ&@^Áä , äc@Á ] [ •äçç^•Á^ [ ~c@Áä^ç^! [ ] { ^ } cÄ ] ! [ !*!æ { { ä } *Á•^!-!^! [ !cä } *Áæ } Áä } &!^æ•^Áä } Äc@^•ä!Áæä!äc^•Ác [ Áä { ] [ ^ { ^ } cÄæÄ!ÉPÁ!ä-^•\ä  Áä^ç^! [ ] { ^ } cÄ- [ !Á^ [ ~c@  |
| FE     | Q}&!^æ•^Á} ~ { à^!Á[-Á^ [ ~c@Áä } ç [ !ç^•hÄ } ÄW!äæ } ÁÖ [ { { ~ } äc^•Áç [ !^•c!^  |
| FF     | Þ~ { à^!Á[-Áä } ääçä~æ!•Äç^ [ ~c@Áæ } äÄç [ ] ~ } c^•!•DÄä } &!^æ•ä } *Á\ [ ,  ^ä*^hæ } äD [ !Á•\ä  ^•hÄ } & [ ] c^• } cæ } äÄ&æ!^!•Äçæ& [ ••Á•~äb^cÄæ!^æ•Á!æ } *ä } *Á-! [ [ Áæ } ä { æ!Á•&ä^ } &^Ác [ Á^ } çä! [ ] { ^ } cæ!Á•&ä^ } &^Ác [ c^•&@ } [ ] [ ] *^D                   |
| FG     | Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Á] æ!cä&ä } æ } c•Á , @ [ Á ]  æ } Áæ } äÄä { ] [ ^ { ^ } cÄæÄ ] ! [ !*!æ { Á^çæ!~æcä [ ] É   |
| FH     | Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Á] æ!cä&ä } æ } c•Á , @ [ Á!^ ] [ !cÄc@^•!^•~ c•Á [-Ác@^•!Á ] ! [ !*!æ { Á^çæ!~æcä [ ] É  |
| FI     | ä}&!^æ•ä } *Á } ~ { à^!Á[-Á^!^&c^•äDæ ] [ ] c^•!äçç! [ æ^•ÉÁc [ , ] Á [ !Á&äc^•Á [-~ä&äæ!•Äc@æcÄ~•^hÄ } - [ ! { æcä [ ] *æä } ^äÄæcÄVUÖÖÄä } Ä!^æä^!•@ä } Áæ } äÄä^&ä•ä [ ] } Á { æ!ä } *  |
| FÍ     | Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Á] æ!^ } c•Á~ } ä!•cæ } ää } *Á-æ { ä!^Ác!æ } •äcä [ ] Äc@! [ !~*@Á ] æ!^ } cæ^•ÉÁäç [ !&^Á [ !•^!æ!æcä [ ] } Á , @ [ Á^ } ä!•cæ } äÄc@^•hÄ { ] æ&cÄ [-Ác@^•^Á&@æ } *^•Á [ ] Äc@^•!Á&@ä!^! } É  |
| FÎ     | Þ~ { à^!Á[-Á] æ!cä&ä } æ } c•Á!^! [ !cÄ~•ä } *Á•\ä  ^•Á!^æ! } ^äÄä } Á& [ { { ~ } äc^•Á•^cçä } *   |
| FÏ     | Þ~ { à^!Á[-Á-æ! { ^!•Á , äc@Áä!•æä!äc^•Á• { æä } cæä } ä } *Á^ { ] [ ] [ ^ { ^ } c   |

G€FFAW)äç^!•öc^Á[-ÁX^! { [ ]c!Ö [ { äi}^äáÜ^•^æ!&@kæ}ä!Öçc^•ä [ }ACE) } ~æ!áÜ^ [ !c![-ÁCE&& [ { ]!•@ { ^}c•kæ}ä!Ü^•~|c•

|    |  |
|----|--|
| Fì | ä} & !^æ•^Áä} } ~ { à^!Á[-Á^ [ ~c@Á!^æ&@^äA, äc@A ] [ •äç^Á^ [ ~c@Á!^ç^ [ ] { ^}ç! ] ! [ *!æ { { ä} *<br>ä^ [ { } •c!æc^Á { æ•c^!^Á- [ !Ácæ! *^c^ä!ä-^Á•\ä  •ÉÁä} &   ~ ää } *K!Ö^&ä•ä [ } Á { æ\ä } *LÁ, ä•^Á~•^Á[-<br>!^• [ ~ !&^•LÁ [ { { ~ } ä&æcä [ ] LÁæ&&^ ] cä } *Áä~^!^ } & ^•LÁ ^æä!•@ä ] LÁ~•^•~ ß { æ!\^cæä ^Á•\ä  •L<br>@^æ!c@^Á!ä-^c^ ^Á&@ [ ä&^•LÁæ } äß [ !Á•^!-É!^• [ ] } •ää!äc^ |
| FJ | ß~ { à^!Á[-Áç [ ] ~ } c^!^•Áä^ { [ ] •c!æcä } *Á^, Ác^&@ } ä~ ^•Dæ&cäçäcä^•Áä } Á&  ~ ä•Áæ } ä! ] ! [ *!æ { •Á ^æ! } ^ä<br>c@! [ ~ *@Á!ÉPÁc!æä } ä } *Áæ } ä!Á^ç^ [ ] { ^ } c  |
| G€ | ß~ { à^!Á[-Á ] æ!cä&ä ] æ } c•Á, @ [ Áæ!^ÁÖ } *!ä•@Á!æ } *~æ^!Á ^æ! } ^!•Á, ä  Áä } & !^æ•^Ác@^!Á!^ç^!Á[-ÁÖ } *!ä•@<br>]! [ ~ä&ä^ } & ^  |

**Outcome #1**

**1. Outcome Measures**

Q) & !^æ•^Á } ~ { à^!Á[-Á& [ { { ~ } äcä^•Á^•cæä!ä•@ä } \*Á [ !Á^ç ] æ } ää } \*Á& [ { { ~ } äc^Ác!^Á } ! [ \*!æ {

**2. Associated Institution Types**

ÁF! ÎG!Öçc^•ä [ }

**3a. Outcome Type:**

Ö@æ } \*^Áä } ÁCE&cä [ } ÁÜ~c& [ { ^ÁT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | H      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

X^! { [ ] c!•Á~!äæ } Áæ } ä!& [ { { ~ } äc^Á- [ !^•c•Á ] ! [ çä~^Á^& [ ] ! [ \*ä&æ!Á•^!çä&^•Ác@æc!ä^ } ^-äc!c@^  
^ } ç! [ ] { ^ } çæ!ÉÁ^& [ ] [ { ä&ÉÁæ } ä!• [ &äæ!Á@^æ!c@Á [-Ác@^Á•cæc^É

**What has been done**

Üä } & ^ÁFJJ ÎÉÁc@! [ ~ \*@Á ] æ!c } ^!ä } \*Á, äc@ÁXVÁÖ^ } æ!c { ^ } ç! [-Áç [ !^•c•ÉÁÜæ! \ •Áæ } ä!Ü^&!^æcä [ ] ÉÁæ } Á^ä \*cÉ  
^ \ Á& [ ~ !•Á ] !^ } æ!^•Á } æ!cä&ä ] æ } c•Ác [ Áà^& [ { ^Á•c^, æ!ä•Á [-Ác@^!Á& [ { { ~ } äc^Ác!^Á } ! [ ~!&^ÉÁÁCEÁGE  
@ [ ~ !Áä } c^! } •@ä ] Áä•Á& [ { ] |c^!ä- [ !Á&^!cä-ä&æcä [ ] ÉÁÁQ } Ác@^Á Y ä } c^!Á [-ÁG€FFÁæA~!ç^Á [-Áæ!|Á ] æ!cä&ä ] æ } c•  
-! [ { ÁFJJ ÎÁc [ Á ] !^•^ } ç!ä } Ác@^ÁÜc^, æ!ä•@ä ] Á [-Ác@^ÁW!äæ } ÁSæ } ä•&æ } ^Á& [ ~ !•^çÜUWSD@æ!ÁFH Ì  
!^• [ ] } ä^ } c•É

**Results**

CE•Áæ!Á^•~|ç! [-ÁÜUWS!ä } ÁG€FFÉÁH& [ { { ~ } äcä^•Á^•cæä!ä•@ä } ^!Á^ç [ ] æ } ä!Áä& [ { { ~ } äc^Ác!^Á } ! [ \*!æ { •É  
G€FFÁ~!ç^Á!^• [ ] } ä^ } c•Áä } ää&æc^!áG Í Á@æ!á^•\* } Á& [ { { ~ } äc^Ác!^Á } ! [ \*!æ { •Áæ } ä! Í Á@æ!á  
^ç ] æ } ä!Á^ç!cä } \*Á ] ! [ \*!æ { •Á!^ } [ !cä } \*Áæ } ä!Á& [ ] c!ä~cä } \*ÁGÉ Í GJÁ@ [ ~ !•Áä } Á! [ &æ!~!äæ } Áæ } ä!Á& [ { { ~ } äc^  
- [ !^•c!^Á!æc^!á~ [ !c•ÉÁV@^!Á!^ } [ !c^!á•ä } & ^ÁFJJ ÎÁFÉG Í €Ác!^•Á@æç^!á^ } Á ] |æ } c^!ÉÁV@^•^Ác!^Á•Á, ä||  
æ!ä• [ !áFÉ Í Í ÉH€€Á \*æ! [ ] •Á [-Á!æä } , æc^!ÉÁ!^!ä~&ä } \*Á•c [ ! { , æc^!Á& [ { { ~ } äcä^•Á } ~cÁc!^æcÉÁV@^!Á, ä||  
@æç^!Áæ } Á^& [ ] [ { ä&!á^ } ^-äc!c [ çæ!ä } \*ÁÁ ÎHÉ Í €€ÉÁV@æc!çæ!~^!á [ ~ ä|^Á, @^ } Ác!^•Á!^!æ&@Á ÎÁ!Á!ä!æ { ^c!É

GEFFAW)äç^!•äc^![-ÄX^! { [ ] cÄÖ { äi } ^äÄÜ^•^æ!&@Äæ } ä!Öçc^••ä [ ACE ) } ~æ!ÄÜ^ [ !cÄ[-ÄCE&& [ { ] i•@ { ^ } c•Äæ } ä!Ü^•~|c•

FÈ€GÏÄc!^^•Ä@æç^Äà^^}Ä] |æ } c^ÄÄÄ } Ä!ä ] æ!äæ } Äæ!^æ•ÈÄÄ { [ ] ! [ Çä } \*Ä , æc^!Ä ~ æ|äc^Äæ } äÄ• [ ä!Ä•cæàä!ä : æcä [ ]  
æ [ ] \*ÄX^! { [ ] c!•Ä , æc^! , æ^•ÈÄÄÏFÏÄ@æ : æ!ä [ ~ •Äc!^^•Ä@æç^Äà^^} ÄäÄ^ } cä-ä^äÄæ } ä! [ !Ä!^ { [ Ç^äÈÄÄV@•  
•~ ] ] !c^ÄÄ\*!^^} Ää } -!æ•c!~&c^!^Ää•ÄæÄçäcæ!Ä& [ { [ ] } ^ } cÄc [ Ä•~•cæä } æà!^Ä!çæä!^Ä& [ { { } äcä^•Ää }  
X^! { [ ] } cÈ

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area   |
|---------|------------------|
| FGI     | W!àæ}ÄØ [ !^•c!^ |

#### Outcome #2

##### 1. Outcome Measures

ä } &!^æ•^Ää } Ä } ~ { ä^!Ä [-Ä-æ! { Äæ } ä!ä } ~ !æ!Ä!^•äÄ^ } c•Ä , äc@Äää•æàä!çä^•Ä•~&&^••~||^Ä•^!ç^ÄäÇä^Ä&æ•^Ää•  
&| [ •^äÄÄ , @ä&@Ää•Ää^~ä } ^äÄæ•Ä@æçä } \*Ää } &!^æ•^Ää•æcä•-æ&cä [ } Ä , äc@Äæ&c^æ!Ä [ !Ä ] [ c^ } cäæ!Ä^ { ] [ ^ { ^ } cÄæ } ä  
{ æä } cæä } ^äÄ [ !Ää } &!^æ•^Ää } & [ { ^

##### 2. Associated Institution Types

ÄFÏÏGÄÖçc^ } •ä [ }

##### 3a. Outcome Type:

Ö@æ } \*^Ää } ÄCE&cä [ ] ÄÜ~c& [ { ^ÄT^æ•~!^

##### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| GEFF | JI     |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

Ü~!æ!Äæ } äÄCE\*!ä&~|c~!æ!ÄX [ &Ü^@æäÄÇÜCEXÜDÄ@æ•Ä { !^Äc@æ } Ä!€^Äæ!•Ä [-Ä& [ ||æà [ !æcä [ ] Äà^c , ^^ } Äc@^  
W } äç^!•äc^![-ÄX^! { [ ] cÄÖçc^ } •ä [ ] Äæ } äÄX [ &Ü^@æäÄX^! { [ ] cÈÄÄV@ä•Ää } [ Çæcäç^Ä ] ! [ \*!æ { Ä , æ•Äc@^Ä-ä!•c  
[-Ääc•Ä\ä } äÄä } Äc@^Ä } æcä [ ] Äc [ Ä ~^!ÄXÜÄ•^!çä^•Ä•Ä ] ^&ä-ä&æ||^Äc [ Ä-æ! { ^!•Äæ } äÄ!~!æ!Ä-æ { ä!ä^•Ä!çä } \*Äæ } ä  
, [ !\ä } \*Ä , äc@Äää•æàä!çä^•È

###### What has been done

ÜCEXÜÄ@æ•Ä ] ! [ Çä^äÄÄ ] ! [-•••ä [ ] æ!Ä^çæ!~æcä [ ] ÈÄ& [ ~ } •^|ä } \*Äæ } äÄæ••ä•cæ } &^Äc [ Ä~ } ä!^ä•Ä [-Ä-æ! { ^!•  
æ } äÄ!~!æ!ÄX^! { [ ] c^!•ÈÄV@^Äæ!ÄÄ , [ !\ä } \*Ä , äc@ÄX^! { [ ] cÄCE\*!CEä!çä^ÈÄ , [ !\ä } \*Ä , äc@Äæä [ ~cÄ!€Ä-æ! { ^!•  
^æ&@Ä^Äæ!Äæ } äÄX^! { [ ] cÄÖçc^! { ÄP^æ|c@ÄVæ•ÄØ [ !^Äc [ Ä ] ! [ { [ c^ÄæÄ•~•cæä } æà!^Äæ } äÄ@^æ|c@^Ä-æ! {  
, [ !\ä-!&^È

###### Results

V@ä•Ä^Äæ!ÄÜCEXÜÄ!^Ä^Äç^äÄÄFÏÏÄ!^Ä-!|æ!Ä- [ !Äc@ [ •^Ä•^Ä\ä } \*Ä•^!çä&^ÈÄ [ ] ^ } ^äÄJÏÄ } ^ , Äæ•^•ÈÄ&| [ •^ä  
ÏÏÄ~&&^••~||^ÈÄæ } äÄä } Ç^•c^äÄÄFFÏÈ€€Ä , äc@Ä!~!æ!ÄX^! { [ ] cÄ-æ! { ^!•ÈÄ!çä } \*Äæ } äÄ , [ !\ä } \*Ä , äc@  
&@! [ ] ä&Ää|| } ^••ÈÄ [ ] Äæ\*!ä&~|c~!æ!Ää~•ä } ^••Äæ } äÄ^ { ] [ ^ { ^ } cÄc!æc^\*ä^ÈÄÄV@^ÄCE\*!CEä!çä^Ä ] ! [ b^cÄ@^ ] ! Ää  
ÏGÄ-æ! { ^!•Ä { æä } cæä } Ä^ { ] [ ^ { ^ } cÈÄÖçc^@Ää } ääçää~æ!Ä@æ•ÄæÄc [ !^ÈÄÜ } ^ÄJHÄ^Äæ!È [ !ä-æ! { ^!Äà^Ä&æ { ^

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@Äæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•Äæ}ä!Ü^•~|c•

•^ç^!^|^Äâ^]|!•••^äÄæ-c^!Ää}b~|ä} \*Ä@ä { •^|^Äæ} äÄæ| { [ •cÄ@ä•ÄJFÄ^Äæ!Ë [|äÄ, ä-^ÄÄc!~ä} \*Äc [Ä&|ä { äÄ [ }Äc@^  
c!æ&c [ !Äc [Ä@^]|Ä@ä•Ä• [ }ËÄP^Ä!^&^ç^äÄ•c^]•Äæ} äÄ@æ} ä!æä|Ä [ ]Ä@ä•Äc!æ&c [ !ËÄCEcÄJÄ@^Ä, æ•Ä!| [ ~äÄc [Ä!^] [ !:c  
@^ÄäâäÄJÄÄÄ[-Äc@^Ä&@ [ ]]ä} \*Ä [ }Äc@^Ä-æ! { Äc@ä•Ä•^æ• [ }ËÄÄPä•Ä [ ~c| [ \Äæ} äÄæccäc~ä^Äæ!^Ä\*!^æc|^





G€FFÄW}äç^!•öc^Á[-ÁX^! { [ ]}cÁÖ [ { ää}^äáÜ^•^æ!&@hæ}ä!Öçc^}•ä [ ]ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]|ä•@ { ^}c•hæ}ä!Ü^•~|c•

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | Í      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area   |
|---------|--|
| Í€ì     | Ô [ { { ~}äc^AÜ^• [ ~!&^ÁÚ æ} }ä} *Áæ} ä!Ö^ç^  [ ] { ^}c |

**Outcome #6**

**1. Outcome Measures**

Q}&!^æ•^Ác@^Á} ~ { à^!Á [-Áç [ ] ~ }c^!•Á•^|-Á!^ [ !cä} \*Áæ} Ää} &!^æ•^Áä} Ác@^!Áæàä|äc^ Ác [ Ää { ]|^ { ^}cÄæÁ |ËP  
|ä-^•\ä|!ä^ç^| [ ] { ^}cÁ- [ !Á^ [ ~c@  
P [ cÁÜ^ [ !cä} \*Á [ ] Ác@ä•ÁU~c& [ { ^ÁT^æ•~!^

**Outcome #7**

**1. Outcome Measures**

Q}&!^æ•^Ác@^Á} ~ { à^!Á [-Á^ [ ~c@Á, @ [ Á•^ç^æ} ä!^æ&@Á\* [ æ|•Áä^ } cä-ä^ä!æçc@^Áà^\*ä} }ä} \*Á [-Ác@^Á |ËPÁ^~^æ!

**2. Associated Institution Types**

ÁFì îGÁÖçc^}•ä [ ]

**3a. Outcome Type:**

Ô@æ} \*^Áä} ÁCE&cä [ ] ÁU~c& [ { ^ÁT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | I JH   |

**3c. Qualitative Outcome or Impact Statement**

G€FFÄW}äç^!•öc^Ä[-ÄX^! { [ ]}clÖ [ { ää}^äáÜ^•^æ!&@háæ}áíÖçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !:cÄ[-ÁCE&& [ { ]}|ä•@ { ^}c•háæ}áíÜ^•~|c•

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area           |
|---------|--------------------------|
| ì€î     | ÿ [ ~c@ÁÖ^ç^ [ [ ] { ^}c |

**Outcome #8**

**1. Outcome Measures**

Q}&!^æ•^Ác@^Á}~ { à^!Á[-Á&|~ à•Áâ [ ä } \*Áæç|^æ•cÁîÁ@ [ ~!•Á[-Á& [ { { ~ }äc^Á•^!çä&^

**2. Associated Institution Types**

ÁFîîGÁÖçc^}•ä [ }

**3a. Outcome Type:**

Ô@æ} \*^há}ÁCE&cä [ }ÁU~c& [ { ^ÁT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | I H    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area           |
|---------|--------------------------|
| ì€î     | ÿ [ ~c@ÁÖ^ç^ [ [ ] { ^}c |

G€FFÁW}äç^!•äc^Á[-ÁX^! { [ ]}cÁÔ [ { ää}^äáÜ^•^æ!&@há}á!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]}|ä•@ { ^}c•há}á!Ü^•~|c•

### 1. Outcome Measures

ä}&!^æ•^Áä}Á } { à^!Á [-Á^ [ ~c@Á!^æ&@^áÁ, äc@Á [ •äcäç^Á^ [ ~c@Áä^ç^| [ [ { ^}cÁ] ! [ \*!æ { { ä} \*Á•^|-Á!^} [ !cä} \*

GEFFÄW}äç^!•öc^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@hæ}äÄÖçc^••ä [ ]ÄCE} }~æjÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•hæ}äÄÜ^•~|c•

**KA Code**    **Knowledge Area**  
ì€î            ÿ[~c@ÄÖ^ç^|[ ] { ^}c

**Outcome #12**

**1. Outcome Measures**

Q}&!^æ•^Äc@^Ä}~ { à^!Ä[-Ä]æ!cä&ä]æ}c•Ä, @ [Ä]!æ}Äæ}äÄä { ]|^ { ^}cÄæÄ! [ !\*!æ { Ä^çæ|~æcä [ ]É  
P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

**Outcome #13**

**1. Outcome Measures**

Q}&!^æ•^Äc@^Ä}~ { à^!Ä[-Ä]æ!cä&ä]æ}c•Ä, @ [Ä!^] [ !cÄc@^Ä!^•~|c•Ä[-Äc@^Ä!Ä]! [ !\*!æ { Ä^çæ|~æcä [ ]É  
P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

**Outcome #14**

**1. Outcome Measures**

ä}&!^æ•ä} \*Ä}~ { à^!Ä[-Ä^|^c^äDæ] ] [ ä}c^äÄçä|æ\*^ÉÄc [ , }Ä [ !Ä&äc^Ä[-ä&äæ]•Äc@æcÄ~•^Ää}~ [ ! { æcä [ ]Ä\*æä}^äÄæc  
VUÖÖÄä}Ä|^æä^!•@ä]Äæ}äÄä^&ä•ä [ ]Ä { æ\ä} \*  
P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

**Outcome #15**

**1. Outcome Measures**

Q}&!^æ•^Äc@^Ä}~ { à^!Ä[-Ä]æ!^}c•Ä~ }ä^!•cæ}ää} \*Ä-æ { ä|^Äc!æ}•äcä [ ]Äc@! [ ~\*@Ä]æ!^}cæ\*^ÉÄäç [ !&^Ä [ !  
•^}æ!æcä [ ]Ä, @ [Ä~ }ä^!•cæ}äÄc@^Ää { ]æ&cÄ [-Äc@^•^Ä&@æ} \*^•Ä [ ]Äc@^Ä!Ä&@ä|ä!^}É  
P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

**Outcome #16**

**1. Outcome Measures**

P~ { à^!Ä[-Ä]æ!cä&ä]æ}c•Ä!^ [ !cÄ~•ä} \*Ä•\ä|!•Ä|^æ!}^äÄä}Ä& [ { { ~}äc^Ä•^ccä} \*

**2. Associated Institution Types**

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ] cÄÖ [ { ää } ^äÄÜ^•^æ!&@Äæ} ä!Öçc^••ä [ } ÄCE } } ~æ|ÄÜ^ [ ! cÄ [-ÄCE&& [ { ] ä•@ { ^ } c•Äæ } äÄÜ^•~|c•

ÄF! ÎGÄÖçc^••ä [ }

**3a. Outcome Type:**

Ö@æ } \* ^Ää } ÄCE&cä [ } ÄÜ ~ c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | GFJ    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

ÿ [ ~c@Äæ } äÄæä~|c•Ä } ^^äÄ [ ] [ ! c~ } äcä^•Äc [ Ää^ç^| [ ] ÄæÄ•^cÄ [-Ä•\ä|] •Äc [ Ä^~^&cäç^| ^Ä^ } \*æ\*^Ää } Äc@^ä! & [ { { ~ } äc^Äc [ Äæää!^••Ää••~^•ÉÄcÄä•Äÿ cÄc@ä•Ää^ç^| [ ] { ^ } cÄ [-ÄP æ} ÄÖæ } äcæ|Äc@æcÄÖçc^••ä [ } æää!^••^•Ä , äc@Äæ! \*^c^ÄÄ ] ! [ \*!æ { { ä } \*É

**What has been done**

Ú! [ \*!æ { { ä } \*Ä!^æ&@^äÄ& [ { { ~ } äc^Ä { ^ { ä!•Ä , äc@Ä|^æä!•@ä ] Ä•\ä|Äc!æä } ä } \*Äæ } äÄ& [ { { äcc^ÄÄ , [ ! \Äc [ & [ { ] |^c^Ä& [ { { ~ } äc^Ä- [ & ^äÄ ] ! [ b^&c•ÉÄä } ~ [ ! { ^äÄ& [ { { ~ } äc^Ä { ^ { ä!•Ä [ } Ä { ä|äcæ! ^Ä-æ { ä|Ä } ^^ä•æ } äÄ• ] ] [ ! c•Ä { [ ää|ä : ä } \*Äc@^ { Äc [ Ä!^æ&@Ä [ ~ cÄc [ Ä [ c@^!•LÄ@^|äÄæ } } ~æ|Ä^ } ^! \*^Ä& [ ] -^!^ } &^•Ä^ } & [ ~!æ\*ä } \* [ ] \*Äc^! { Ä&@æ } \*^•Äc@æcÄä^ } ^-äcÄ& [ { { ~ } äcä^•ÉÄæ } äÄ ] ! [ \*!æ { { ä } \*Ä- [ & ^äÄ [ } Ä^ cæä|ä•@ä } \*Ä [ ! ^ç } æ } ää } \*Ä& [ { { ~ } äc^Ä \*!^Ä } Äæ } äÄä } -!æ•c!~&c~!^Ä } ^^ä^äÄä } Ä& [ { { ~ } äcä^•É

**Results**

CE•ÄæÄ!^•~|cÄ [-Äc@^•^Ä^~ [ ! c•Ä!GÄä } ääçää~æ|Äæ••ä•c^Ää } Äc@^Ä æ } æ\*^ { ^ } cÄ [-Äc@^Ä !^Ä } Ää } -!æ•c!~&c~!^ , @ä&@Ää•Ä!^& [ \* ] ä : ^äÄæ•ÄæÄçæ|æä|^Ä& [ [ ] ] ^ } cÄ [-Ä• cæä } æä|^Ä& [ { { ~ } äcä^•ÉÄCE } Äæääcä [ } æ|ÄH Í | { ä|äcæ! ^Ä&@ä|ä!^ } Ä , ^!^Ä!^æ&@^äÄä^Ä& [ { { ~ } äc^Ä { ^ { ä!•Ä^ } [ ] , ^!^äÄä^Äc@^Ää!Ä^ , Äæ , æ!^ } ^••Ä [-Äc@^ } ^^ä•Ä [-Ä { ä|äcæ! ^Ä-æ { ä|ä^•ÉÄ { Äc@^ & [ [ ] ] ^ } cÄ [-Ä• c^äÄäG|c^ä!Ä } ^ , Äæ , Þcæä

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]c!Ö [ { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^••ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]|ä•@ { ^}c•hæ}ä!Ü^•~|c•

**Outcome #17**

**1. Outcome Measures**

▷~ { ä^!Ä[-Ä•æ! { ^!•Ä, äc@Ääâ•æä!|äcä^•Ä { æä}cæä}ä} \*Ä^ { ]|[ ^ { ^}c

**2. Associated Institution Types**

ÄF! ÎG!Öçc^}•ä [ }

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ }ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | ÎG     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area  |
|---------|---|
| ÏGH     | Pæ:æ!ä•Äc[ÄP~ { æ}ÄP^æ c@hæ}ä!Üæ~^c^                        |
| ÏEG     | P~ { æ}ÄÖ^ç^ [ ] { ^}c!æ}ä!ÄØæ { ä ^ÄY^ ËÖ^ä} *             |
| ÏEÍ     | Ö [ { { ~}äc^ÄQ}•cäc~cä [ ]•ÉÄP^æ c@ÉÄæ}ä!Ü [ &äæ ÄÜ^!çä&^• |

**Outcome #18**

**1. Outcome Measures**

ä}&!^æ•^Ää}Ä}~ { ä^!Ä[-Ä^ [ ~c@Ä!^æ&@^äÄ, äc@Ä] [ •äcäç^Ä^ [ ~c@Ää^ç^|[ ] { ^}c!Ä] ! [ \*!æ { { ä} \*Ä^ { [ ]•c!æc^ { æ•c^!^Ä- [ !Äcæ! \*^c^ä!|ä~^Ä•\ä|!•ÉÄä} &|~ ää} \*KÄÖ^&ä•ä [ }Ä { æ\ä} \*LÄ, ä•^Ä~•^Ä[-Ä!^• [ ~!&^•LÄ& [ { { ~}ä&cä [ ]L æ&&^}cä} \*Ää~^!^}&^•LÄ|^æä!^!•@ä]LÄ~•^~|ð { æ!^cæä|^Ä•\ä|!•LÄ@^æ|c@^Ä|ä~^c^|^Ä&@ [ ä&^•Läæ} äð [ !Ä•^!-Ë !^•] [ ]•ää!|äc^

**2. Associated Institution Types**

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]cÄÖ { { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^}•ä [ ]ÄCE} } ~æ!ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•hæ}ä!Ü^•~|c•

ÄF! ÎGÄÖçc^}•ä [ ]

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ ]ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | JJH    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

CE&& [ !ää} \*Äc [ Äc^ÄÄPæcä [ ]æ|ÄCE•• [ &ääcä [ ]Ä[-ÄÖ [ ||^\*^•hæ}ä!Ö { [ ]|^!•ÉÄ•äçÄ [ ~cÄ [-Äc@^Ä•^ç^Ä}Ä•\ä|]•  
ä^•ä!^ä!ä^Ä^ { [ ]|^!•Ä-! [ { Ä}^, Ä\*!æä~æc^•Ä, ^!^Ä!^|æc^äÄc [ Ä|^æä!•@ä]ÉÄÄCEÄ!^&^}cÄ•c~ä^Ä^Äc@^ÄÖä!|  
Ü& [ ~cÄÜ^•^æ!&@ÄQ}•cäc~c^ÄÇG€€ÄDÄ@æ•Ä& [ ]-ä! { ^äÄc@æcÄ [ ] [ !c~ }äcä^•Äc [ Ää^ç^Ä| [ ]Ä|^æä!•@ä]Ä•\ä|]Äæ!^  
•&æ!&^É

**What has been done**

WX TÄÖçc^}•ä [ ]Ä!ÉPÄ]! \*!æ { Äc^æ { ^äÄ, äc@ÄæÄ•&@ [ [ ]Ä•~ ]^!çä• [ !^Ä~ }ä [ ]Äc [ Ä&!^æc^Ä!ÉPÄS^æä!•@ä]  
Ö|~ ä•Ää}Äc•Äæ-c^!•&@ [ [ ]Ä]! \*!æ { •Ä- [ &~ •ä [ ]Ä\*!æä^•Ä!É!ÉÄÄV@^Ä]! \*!æ { Ää•Ääæ•^äÄ [ ]Äc@^Ä!ÉPÄ^ [ ~c@  
ä^ç^Ä| [ ] { ^}cÄ { [ ä^|ÉÄæ} äÄ@æ•ÄæÄ•^!çä^Ä|^æ!}ä} \*Ä& [ { [ ]|^}cÉÄQ}c^}cä [ ]æ!Ä~ [ !c•Ä, ^!^Ä { æä^Äc [  
ä] &|~ ä^Ääç^!•^Ä•c~ä^}c•Ä [-Ä• [ &ä|É^& [ ] [ { ä&Ä•cæc~•ÉÄ\*^}ä!^!æ}ä!æ&æä^ { ä&Ä|^!- [ ! { æ}&^ÉÄV@^Ä&|~ ä•  
, ^!^Ää}çäc^äÄc [ Ä]æ!cä&ä]æc^Ää}Äc, [ Ä|^æä!•@ä]Ä& [ ]-^!^} &^•É

**Results**

CEcÄc@^Ä^}äÄ [-Äc@^Ä^~^æ!Ä|^æä!•Ä& [ { ]|^c^äÄæÄ•~!ç^Äæ}ä!Ä!^ [ !c^äKÄ!ÉÄÄ@æç^Ää} &!^æ•^äÄc@^Äæä!äc~Äc [  
& [ { { ~ }ä&æc^Ä~^Äcäç^Ä|^LÄ!ÉÄÄæ!^Äæä!^Äc [ Ä, [ !\Ä^Äcc^!Ä, äc@Ä [ c@^!•LÄ!ÉÄÄ@æç^Ä { [ !^Ä [ ] [ !c~ }äcä^•Äc [  
ä^ÄæÄ|^æä!LÄ!ÉÄÄ@æç^Ää} &!^æ•^äÄ•^!Ä& [ ]-ää^} &^LÄF€€ÄÄ@æç^Ä]æ} }^Ähæ}ä! [ !\*æ}ä: ^ä!æÄcæ•\L  
F€€ÄÄ@æç^Ä@æäÄc [ Ä { æ\^Äæ} äÄæ&&^}cÄæÄ\*! [ ~ ]Ää&ä~ä [ ]LÄ!ÉÄÄæ!^Ä { [ !^Ä& [ { ~ [ !cæä|^Ä•] ^æ\ä} \*Ä [ ~ cÄä }  
æÄ\*! [ ~ ]Ä [ !Ää]Ä}~ ä!ä&ÉÄÄV@^Ä { [ !^Ä^ç^Ä|^!ä^} &^Ä^ [ ~ c@Ä@æç^Ä, äc@Ä|^æä!•@ä]Ä! [ !^•hæ}ä!^çc!æÉ&~!|ä&~|æ!  
æ&cäçäcä^•ÉÄc@^Ä { [ !^Ä|^!~Äc@^Äæ!^Äc [ Äæ•]ä!^Äc [ Ä|^æä!•@ä]ÄÇÖä!|ÄÜ& [ ~cÄÜ^•^æ!&ÄÖ [ ~ } &ä|ÉÄG€€ÄDE  
Üæ!cä&ä]æ}c•Äæ!^Ä [ ~^!^äÄc@^Ä [ ] [ !c~ }äc^Äc [ Ää^ç^Ä| [ ]Ä!äcä&æ|Ä|ä-^Ä•\ä|]Äæ}ä!GF•cÄ&^}c~!^Ä^ { [ ]|^ { ^}c  
•\ä|]•É

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area           |
|---------|--------------------------|
| !€!     | ÿ [ ~c@ÄÖ^ç^Ä  [ ] { ^}c |



G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]c!Ö [ { ää}^äÄÜ^•^æ!&@Äæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]!ä•@ { ^}c•Äæ}ä!Ü^•~|c•

**Outcome #19**

**1. Outcome Measures**

▷~ { ä^!Ä[-Äç [ | ~ }c^!^!•Ä^ { [ ]}•c!æcä} \*Ä}^, Äc^&@}ä~^•Dæ&cäçcäcä^•Ää}Ä&|~ä•Äæ}äÄ]! { \*!æ { •Ä|^æ!}^ä  
c@! [ ~ \*@Ä!ÉPÄc!æä}ä} \*Äæ}äÄ^ç^! [ [ ] { ^ { } }c

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ ]

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ }ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | FHH    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

V@^ÄW} äc^äÄÜçc^•Ää•Ä-æ|!ä} \*Ääæ} \*^! [ ~ •|^Ä^@ä} äÄ [ c@^!Ä} æcä [ ]}•Ää}Ää^ç^! [ ]ä} \*Ääc•Ä~c~!^Ä, [ !~ [ !&^Ä [-  
•&ä^}cä•c•ÉÄ^} \*ä}^!^!•ÉÄæ} äÄc^&@ [ | [ \* ^Ä^ç [ ]^!c•Äæ} äÄ-æ&^•ÄæÄ&!ä•ä} Äc•Äæä!äc^Äc [ Ä^!^Ä]Ä~]Ä, äc@  
ä}&!^æ•ä} \*Ää^ { æ} äÄ- [ !Ä]! [ ~^••ä [ ]}æ|Äc!æä}^äÄä}Äc@^•^Ä-ä|ä•ÉÄQ}ÄX^! { [ ]}cÉÄ•cæ} äæ!ää: ^äÄc^•cÄ•& [ !^•  
ä}Ä•&ä^}&^Ä\*! [ , Ää} &!^æ•ä} \*|^Ä, [ !•^Äæ•Ä•c~ä^}c•Äæ^ÉÄÜç^!Ä!ÉÄÄ [-Ää}c^! { ^ääæ!^Äæ} äÄ•^& [ ] äæ!^  
•c~ä^}c•Ä!æ} \Ä]æ!cäæ|^Ä]! [-ä&ä^}cÄ [ !Ä^! [ , Ä]! [-ä&ä^}cÉÄ [ ] Äc@^ÄG€€JÄPÖÖCEÜÄc^•cÉ

**What has been done**

G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]}clÖ [ { ää}^äáÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]}|ä•@ { ^}c•hæ}ä!Ü^•~|c•  
 ì€î      ÿ [ ~c@ÄÖ^ç^| [ ] { ^}c

**Outcome #20**

**1. Outcome Measures**

▷~ { ä^!Ä [-Ä]æ!cä&ä]æ}c•Ä , @ [Äæ!^ÄÖ} \*|ä•@Ä|æ} \*~æ\*^Ä|^æ!}^!•Ä , ä||Ää}&!^æ•^Äc@^ä!Ä|^ç^|Ä [-ÄÖ} \*|ä•@  
 ]! [-ä&ä^}&^

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ }

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄS} [ , |Ää\*^ÄU~c& [ { ^ÄT^æ•~|^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | HÎ     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area          |
|---------|-------------------------|
| ì€î     | ÿ [ ~c@ÄÖ^ç^  [ ] { ^}c |

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities

**Brief Explanation**



G€FFÄW}äç^!•öc^Ä[-ÄX^! { [ ] cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ} äÄÖçc^••ä [ }ÄCE} } ~æ|ÄÜ^ [ [ !cÄ[-ÄCE&& { [ ] !•@ { ^}c•Äæ} äÄÜ^•~|c•

**V(A). Planned Program (Summary)**

**Program # 3**

**1. Name of the Planned Program**

Ø [ [ äÄÜæ~^c^

**V(B). Program Knowledge Area(s)**

FÉÄÜ! [ \* !æ { ÄS} [ , | ^ ä \* ^ ÄCE! ^æ•Äæ} äÄÜ^!&^ } cæ \* ^

| KA Code | Knowledge Area   | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|--|-----------------|-----------------|----------------|----------------|
| H€Í     | CE}ä { æ ÄÜ@^••ä [ [ * ä&æ ÄÜ! [ &^••^•  | €Ä              |                 | FÍÄ            |                |
| Í€F     | Þ^, Äæ} äÄQ { [ ] [ ç^äÄØ [ [ äÄÜ! [ &^••ä } * V^&@} [ [ ] * ä^•   | €Ä              |                 | ÍÄ             |                |
| Í€G     | Þ^, Äæ} äÄQ { [ ] [ ç^äÄØ [ [ äÄÜ! [ ä~&c•   | €Ä              |                 | GÄ             |                |
| Í€H     | U^ æ äc^ ÄTæä} c^} æ} &^Ää} ÄUc [ !ä } * Äæ} ä Tæ! \^cä } * ÄØ [ [ äÄÜ! [ ä~&c•  | €Ä              |                 | IÄ             |                |
| Í€F     | O& [ ] [ { ä&•Ä [-ÄCE* !ä&~ c~ !æ ÄÜ! [ ä~&cä [ ] Äæ} ä Øæ! { ÄTæ} æ * ^ { ^ } c   | €Ä              |                 | FHÄ            |                |
| Í€I     | Tæ! \^cä } * Äæ} äÄÖä•c! ä~cä [ ] ÄÜ! æ&cä&^•  | €Ä              |                 | FFÄ            |                |
| Í€Í     | Ö [ ] • ~ { ^! ÄÖ& [ ] [ { ä&•   | €Ä              |                 | FÄ             |                |
| Í€F     | Þ^ c! ä^} cÄÖ [ { [ ] [ • äcä [ ] Ä [-ÄØ [ [ ä   | €Ä              |                 | ÍÄ             |                |
| ÍFF     | Ö } • ~ !^ÄØ [ [ äÄÜ! [ ä~&c•ÄØ! ^Ä [-ÄPæ! { ~   Ö@^ { ä&æ •ÉÄQ} & ~ ää } * ÄÜ^• ä~^• Ä-! [ { CE* !ä&~ c~ !æ Äæ} äÄUc@^! ÄÜ! ~ !&^•                      | H€Ä             |                 | €Ä             |                |
| ÍFG     | U! [ c^&cÄØ [ [ äÄ-! [ { ÄÖ [ ] cæ { ä } æcä [ ] Ää^ Úæc@ [ * ^ } ä&ÄTä&! [ [ ! * æ } ä • { • ÉÄÜæ! æ• äc^• É æ} äÄÞæc~ !æ  ^ ÄU&&~ ! !ä } * ÄV [ çä } • | Í€Ä             |                 | IFÄ            |                |
|         | <b>Total</b>   | F€€Ä            |                 | F€€Ä           |                |

**V(C). Planned Program (Inputs)**

**1. Actual amount of FTE/SYs expended this Program**

|      | Extension |      | Research |      |
|------|-----------|------|----------|------|
|      | 1862      | 1890 | 1862     | 1890 |
| Ú æ} | €È        |      | H€ì      | €€   |

GEFFAW}äç^!•öc^Á[-ÁX^! { [ ]c!Ö [ { ää}^äáÜ^•^æ!&@áæ}á!Öçc^}•ä [ ]ÁCE} }~æ|áÜ^ [ [!cÁ[-ÁCE&& { [ ]!•@ { ^}c•áæ}á!Ü^•~|c•

| Extension           |                | Research       |                |
|---------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c | 1890 Extension | Hatch          | Evans-Allen    |
| FìIHí               | €              | HèIìJF         | €              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| HFíFí               | €              | íGíìHí         | €              |
| 1862 All Other      | 1890 All Other | 1862 All Other | 1890 All Other |
| €                   | €              | îîFèF          | €              |

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

ÁÁÁÁÁÁÁÁ  
 ÁÁÁÁÁÁÁÁÜ^•^æ!&@ÁÉÁ!æ}ääá^c^&cá [ ]Á[-Á- [ [ áÈà [! ]^Á]æc@ [ \*^}•ÉÁÁÜæ}ääá^c^! { ä}æcá [ ]Á[-Á { [!^&~|æ!ááá^}cá^Áá }  
 c!æ&^Èàæ&\Á•c~áá^•ÉÁ  
 ÁÁÁÁÁÁÁÁ**Food Preservation, Safety and Sanitation**ÁÉÁCEÁÁ- [ [ áÁ]!^•^!çæcá [ ]Áæ}á!•æ~c^Á]! [ \*!æ { Á [ ]Á@ [ { ^Á- [ [ á  
 ]!^•^!çæcá [ ]Áæ}á!•æ~c^Ác@! [ ~\*Á}^, ]!á}cÉÁ!æáá [ Áæ}á!ççÁæ•Á, ^||Áæ•Á& [ ]•~|çæcá [ ]•Áæ}á!á}\*/^Á•^••á [ ]  
 , [!\•@ [ ]•É  
 ÁÁÁÁÁÁÁÁ  
 ÁÁÁÁÁÁÁÁ  
 ÁÁÁÁÁÁÁÁ

**2. Brief description of the target audience**

ÁÁÁÁÁÁÁÁ  
 ÁÁÁÁÁÁÁÁ~ÁÁCEá~|c•  
 ÁÁÁÁÁÁÁÁ~ÁÁÜ~à|á&KÁÖ^}^!æ|  
 ÁÁÁÁÁÁÁÁ

**3. How was eXtension used?**

ÁÁÁÁÁÁÁÁ Yæ•Á} [ cÁ!^~!;!ááç [ Áá}Á!^ ] [!cá} \*É

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2011   | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|--------|------------------------|--------------------------|-----------------------|-------------------------|
| Actual | GGÍ                    | G€€€                     | €                     | €                       |



G€FFÄW}äç^!•öc^Ä[-ÄX^! { [ ]clÖ [ { ää}^äáÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•hæ}ä!Ü^•~|c•

**Output #5**

**Output Measure**

Y [ !\•@ [ ]ÄÉÄ•ä } \*|^Ä•^••ä [ }

| Year | Actual |
|------|--------|
| G€FF | Í      |

**Output #6**

**Output Measure**

VXÄ•^\* { ^}öCE&! [ ••Äc@^ÄØ^}&^Ä]! [ \*!æ {

| Year | Actual |
|------|--------|
| G€FF | G      |

**Output #7**

**Output Measure**

Üæää[ÄÜ] [c•

| Year | Actual |
|------|--------|
| G€FF | Î      |

**Output #8**

**Output Measure**

Øæ&cÄÜ@^^c•

| Year | Actual |
|------|--------|
| G€FF | H      |

GEFFAW)äç^!•öc^Á[-ÁX^! { [ ]cáÔ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^••ä [ }ÁCE} } ~æ|áÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•hæ}á!Ü^•~|c•

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME   |
|--------|--|
| F      | Q}&!^æ•^Áæ}áÁ { æä}cæä}Á&[ ]æà [ !æcá [ }Á [ }Á^Ç^}c•Á , äc@Áæ*^}&^Áæ}á!á}á ~•c!^Á^!• [ ] } ^ Ác [ Áæáá!^•• -æ! { Á•æ-^c^Áæ}á!^ { ^! *^}&^Á^!^]æ!^á}^••                                    |
| G      | Q}&!^æ•^Áæ}Á} ~ { á^!Á [-Á-æä!ÉÁ-á á!á!æ^•Á [ !Á^Ç^}cÁæcc^}á^•Á , @ [ Áá^ { [ ] •c!æc^Áæ}Áá}&!^æ•^á ~}á!•cæ}áá} *Á [-Ác@^Á@^æ c@Á!á•\•Áæ•• [ &áæc^á! , äc@Ác@^Á-æä! ~ !^Ác [ Á , æ•@Á@æ}á• |
| H      | Þ~ { à^!Á [-Á]^ [ ] ^Á , @ [ Á•@ [ , Áá { [ ] ! [ Ç { ^}cÁá}Á- [ [ á!•æ-^c^Áæ}á!}!^•^!çæcá [ }Á] !æ&cá&^•  |
| I      | Ó^}^~ä&äæ hæ}á!áæáç^!•^Á^~^&c•Á [-Á}æc~ !æ É!á! [ æ&cáç^Á!á!^cæ!^Á&@^ { ä&æ •Á [ }Á@~ { æ}Á@^æ c@Áæ}á - [ [ á!•æ-^c^   |
| Í      | Šä•c^!áæÁ { [ ] [ &^c [ *^}^•KÁ^}!á&@ { ^}cÉ!•æ { [ ] á} *Áæ}á!Á} [ Ç^ Á~!Ç^ ]æ} &^É   |
| Î      | Q { æ*á} *Á { ^c@ [ á•Ác [ Á&@æ!æ&c^!á: ^Á&æ &ä ~ { Á æ&cæc^Á&!^•cæ  á: æcá [ }Áá}Á&@^á!á!Á&@^•^   |



G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@hæ)ä!Öçc^}•ä [ }ÄCE)} ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•hæ)ä!Ü^•~|c•

## 1. Outcome Measures

G€FFÁW}äç^!•ic^Á[-ÁX^! { [ ] cÁÔ [ { ää}^äáÜ^•^æ!&@hæ}á!Ôçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !:cÁ[-ÁCE&& [ { ] |ä•@ { ^}c•hæ}á!Ü^•~|c•

& [ }•~|cæcá [ }•ÉÁ}^••]!ä} cÁæ!cä&|^•ÉÁ!æää [ Áæ}äÁVXÁ, ^!^Áä [ ]^Á [ }Á@ [ { ^Á- [ [ áÁ•æ-^c^Áæ}áÁ]!^•^!çæcá [ }  
c^&@}ä~^•Á, äc@ÁæÁÉHÁ-æ&~|c^ÁØVÖÉÁÖ [ }•~|cæcá [ }•Á [-c^}Á!^•~|c^áÁ-! [ { Á& [ ]•~ { ^!•Á!^æää} \*Á}^, •]!ä}c

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@kæ)ä!Öçc^}•ä [ }ÄCE)} ~æ|ÄÜ^] [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ)ä!Ü^•~|c•

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@kæ)ä!Öçc^}•ä [ }ÄCE)} ~æ|ÄÜ^] [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ)ä!Ü^•~|c•



GEFFAW)äç^•äc^Ä[-ÄX^! { [ ] cÄÖ [ { ää } ^äÄÜ^•^æ!&@Äæ } äÄÖcc^••ä [ } ACE ) } ~ æ|ÄÜ^ [ ! cÄ [-ÄÖ&& [ { ] ! ä•@ { ^ } c•Äæ } äÄÜ^•~|c•

**V(A). Planned Program (Summary)**

**Program # 4**

**1. Name of the Planned Program**

Ö|[ äæ|ÄØ|[ äÄÜ^•~|äc^Äæ } äÄP^ } \*^!

**V(B). Program Knowledge Area(s)**

FÈÄÜ! [ \*!æ { ÄS [ , |ä^\*^ÄCE!^æ•Äæ } äÄÜ^!&^ } cæ\*^

| KA Code | Knowledge Area   | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|--|-----------------|-----------------|----------------|----------------|
| FFG     | Y æc^!•@^äÄÜ! [ c^&cä [ } Äæ } äÄT æ } æ*^ { ^ } c                                       | €Ä              |                 | î Ä            |                |
| FGH     | T æ } æ*^ { ^ } cÄæ } äÄÜ^•cæä } æä äc^Ä [-ÄØ [ ! ^•c<br>Ü^• [ ~ &^•                     | GÄ              |                 | GÄ             |                |
| FHH     | Ü [     ~cä [ } ÄÜ! ^c^ } cä [ } Äæ } äÄT äcä*æcä [ }                                    | ì Ä             |                 | HÄ             |                |
| G€H     | U æ } cÄÖä [   [ * ä&æ ÄÖ--ä&ä^ } &^Äæ } äÄCEää [ cä&<br>Üc! ^••^•ACE--^&cä } *ÄÜ æ } c• | €Ä              |                 | ï Ä            |                |
| G€Í     | Ü æ } cÄT æ } æ*^ { ^ } cÄÜ^•c^ { •  | JÄ              |                 | í Ä            |                |
| G€Î     | Óæ•ä&ÄÜ æ } cÄÖä [   [ * ^   | €Ä              |                 | l Ä            |                |
| GFF     | Q } •^&c•ÉÄT äc^•ÉÄæ } äÄUc@^!ACE!c@! [ ] [ ä•<br>CE--^&cä } *ÄÜ æ } c•                  | €Ä              |                 | HÄ             |                |
| GFG     | Uæc@ [ *^ } •Äæ } äÄP^ { æc [ ä^•ACE--^&cä } *<br>Ü æ } c•                               | €Ä              |                 | î Ä            |                |

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]}clÖ [ { ää}^äÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•hæ}ä!Ü^•~|c•

| Year: 2011                  | Extension |      | Research |      |
|-----------------------------|-----------|------|----------|------|
|                             | 1862      | 1890 | 1862     | 1890 |
| Ú æ}                        | Gí€€      | €€€  | íEG      | €€€  |
| CE&c~æ ÄÜæä!Ü! [ ~^••ä [ }æ | H€€€      | €€€  | H€J      | €€€  |
| CE&c~æ ÄX [  ~ }c^^!        | €€í       | €€€  | €€€      | €€€  |

2. Actual dollars expend

ts

GEFFAW)äç!•ic^Á[-ÁX^! { [ ]clÔ [ { ää}^äáÜ^•æ!&@kæ}á!Ôçc^•ä [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& { [ ]i•@ { ^}c•kæ}á!Ü^•~|c•

ÁÁÁÁ~ÁÁVermont New Farmer Network.ÉÁÔ [ ]-^!^} &^ÉÁ}^c, [ !\ä } \*ÉÁ& [ ]•~|cæcá [ ]•

ÁÁÁÁ~ÁÁVermont Pasture Network.ÁÜæ•c~!^Á, æ|\•ÉÁá^ { [ ]•c|æcá [ ]•Áæ} áÁc!æ|•ÉÁ& [ ]-^!^} &^ÉÁ& [ ]•~|cæcá [ ]•É  
cæ!á [ ]~•Á { ^áæÉ

ÁÁÁÁ~ÁÁVermont Tourism and Recreation. Ü^•^æ!&@ÉÁ& [ ]-^!^} &^É

ÁÁÁÁ~ÁÁMaster Gardener.ÁÔ [ ]~!•^Éc!æá}Ac@^Ác!æá}^!

ÁÁÁÁ~ÁÁWomen's Agricultural Network. Þ^, •|^cc^!•ÉÁ, ^à•ic^ÉÁ&|æ••^ÉÁ, [ !\•@ [ ]•ÉÁ}áççá~æ|Áæ}á!• { æ||  
\*! [ ]Á& [ ]•~|cæcá [ ]•É

ÁÁÁÁ~ÁÁSustainable Forests. Y [ !\•@ [ ]•ÉÁ}^, •|^cc^!ÉÁ& [ ]•~|cæcá [ ]•

ÁÁÁÁÁÁÁÁÁÁ  
ÁÁÁÁÁÁÁÁÁÁ **AES efforts.**

- ÁÁÁÁÁÁÁÁÁÁ • **Animal Manure Treatment Systems**
- ÁÁÁÁÁÁÁÁÁÁ • **Storm and Wastewater Management Systems**
- ÁÁÁÁÁÁÁÁÁÁ • **Perturbation of soil ecosystems by anthropomorphic interventions**
- ÁÁÁÁÁÁÁÁÁÁ • **Soil nutrient effect on forest ecosystem productivity and lake water quality**
- ÁÁÁÁÁÁÁÁÁÁ • **Soil fertility/chemistry/physical problems associated with waste disposal and bioremod  
faction**
- ÁÁÁÁÁÁÁÁÁÁ • **Economics of organic dairy, crop management and alternative energy**
- ÁÁÁÁÁÁÁÁÁÁ • **Heifer nutrition, rearing and management**
- ÁÁÁÁÁÁÁÁÁÁ • **Dairy nutritional immunology**
- ÁÁÁÁÁÁÁÁÁÁ • **Small ruminant production and management systems**
- ÁÁÁÁÁÁÁÁÁÁ • **Development of strategies to address applied equine issues**
- ÁÁÁÁÁÁÁÁÁÁ • **Biofuels from coconuts and other energy sources**
- ÁÁÁÁÁÁÁÁÁÁ • **Identification of genetic traits that make species invasive**
- ÁÁÁÁÁÁÁÁÁÁ • **Surveillance and prevention of spread of Asian Longhorned Beetle**
- ÁÁÁÁÁÁÁÁÁÁ • **Management of thrips pests in forests and greenhouses**
- ÁÁÁÁÁÁÁÁÁÁ • **Identification/control of fungal propagation**
- ÁÁÁÁÁÁÁÁÁÁ • **Fungal biological plant protection, collection and management**
- ÁÁÁÁÁÁÁÁÁÁ • **Explore microbial pesticides and fungal components as IPM strategies**
- ÁÁÁÁÁÁÁÁÁÁ • **Innate immunity, DNA-based vaccines and mastitis prevention**
- ÁÁÁÁÁÁÁÁÁÁ • **Hormonal regulation of glucose synthesis and milk production**
- ÁÁÁÁÁÁÁÁÁÁ • **Functional genomics and photoperiod effects on hormonal cycles/milk production**



GEFFAW]āç^!•āc^Á[ÁX^! { [ ]clŌ [ { āi}^āáŪ^•^æ!&@hæ}áŌçc^}•ā [ ACE} }~æ|ÁŪ^ [ !cÁ[-ÁCE&& [ { ]i•@ { ^}c•hæ}áŪ^•~|c•

AAAAAAAA  
AAAAAAAA  
AAAAAAAA  
AAAAAAAA  
AAAAAAAA  
AAAAAAAA  
AAAAAAAA  
AAAAAAAA  
AAAAAAAA  
AAAAAAAA

- Explore ruminant lipid metabolism
- Impact of global climate change on forest species diversity
- Genetic diversity among new world ferns and geographic distribution
- Cold hardiness of horticultural perennials

## 2. Brief description of the target audience

AAAAAAAA IĒPKÁCEā~|cÁX[|~}c^!•  
 IĒPKÁŸ|~c@  
 CEā~|c•  
 CE^•^ÁĪÁÉÁFGÁŪ&@ [ [ ACE\*^  
 CE\*!ā&~|c~!^KÁCE] |^Ō! [ , ^!•  
 CE\*!ā&~|c~!^KÁŌŌCEÁŌ! [ ] ÁŌ [ ] }~|cæ}c•  
 CE\*!ā&~|c~!^KÁŌ! [ ] ÁŪ! [ ā~&^!•  
 CE\*!ā&~|c~!^KÁŌæ!~ÁŪ! [ ā~&^!•  
 CE\*!ā&~|c~!^KÁŌ~ā}^ÁŪ! [ ā~&^!•BU , }^!•  
 CE\*!ā&~|c~!^KÁŌæ! { ÁŌæ { ā|ā^•  
 CE\*!ā&~|c~!^KÁŌæ! { ÁTæ}æ\*^!•  
 CE\*!ā&~|c~!^KÁŌæ! { ^!•  
 CE\*!ā&~|c~!^KÁŌ!^!}@[~•^ÁŪ!}æ { ^}cæ|ÁŌ! [ , ^!•  
 CE\*!ā&~|c~!^KÁP [ { ^ÁŌæ!á^}^!•  
 CE\*!ā&~|c~!^KÁŌ}ā~•c!~ÁŪ! [-^••ā [ ]æ!•  
 CE\*!ā&~|c~!^KÁŌç^•c[ & \ Á ]! [ ā~&^!•  
 CE\*!ā&~|c~!^KÁTæ] |^ÁŌ}ā~•c!^  
 CE\*!ā&~|c~!^KÁTæ] |^ÁŪ~\*æ!ÁŪ! [ ā~&^!•  
 CE\*!ā&~|c~!^KÁP [ ] EŌæ!~ÁŪ! [ ā~&^!•  
 CE\*!ā&~|c~!^KÁP~!•^!~Á [ ] ^!æc [ !•  
 CE\*!ā&~|c~!^KÁŪ!}æ { ^}cæ|ÁŌ}ā~•c!~ÁŪ! [-^••ā [ ]æ!•  
 CE\*!ā&~|c~!^KÁŪ! [ ā~&^!Ō~^!•  
 CE\*!ā&~|c~!^KÁŪ! [ ā~&^!Ō [ , ^!•  
 CE\*!ā&~|c~!^KÁŪ!çā&^ÁŪ! [ çā&^!•  
 CE\*!ā&~|c~!^KÁŪ { æ|ÁŌ!~āçÁBÁX^•^cæà|^ÁŌ! [ , ^!•  
 CE\*!ā&~|c~!^KÁX^c!ā}æ!āæ}•  
 CE\*!ā&~|c~!^KŌ [ c^! ] { ^}cÁCE\*^} & ^ÁŪ!• [ ] }^!  
 Ō [ { { } āçá^•KÁŌçá^•hæ}āÁV [ , }•  
 Ō [ { { } āçá^•KÁŌ [ { { } āç^ÁCE&cā [ ] ACE\*^} &ā^•  
 Ō [ { { } āçá^•KÁŠ [ &æ|ÁŪ~ā&āæ!•ĐŠ^æá^!•  
 Ō [ { { } āçá^•KÁŪ&@ [ [ ]•  
 Ō [ { { } āç^Á|^æá^!•hæ}āÁ&āçá : ^}•  
 Ō}çá! [ ] { ^}cæ|ÁŪ! [-^••ā [ ]æ!•KÁŌ}çá! [ ] { ^}cæ|ÁTæ}æ\*^!•  
 Ōçc^}•ā [ ] KÁCEāç!• [ !•  
 Ōçc^}•ā [ ] KÁŌæ&~|c~!ĐŪcæ~  
 Ø [ [ áAQ}ā~•c!~KÁPæ}á!^!•  
 Ø [ [ áAQ}ā~•c!~KÁŪ! [ &^•• [ ]•  
 Ø [ [ áAQ}ā~•c!~KÁŪ! [ ā~&^!•  
 Ø [ !^•c!~KÁŠæ}ā•&æ]^ÁŌ}ā~•c!^  
 Ø [ !^•c!~KÁŸ [ [ áÁŪ! [ &^•• [ ]•



G€FFÁW)áç^!•ic^Á[-ÁX^! { [ ]clÔ [ { áá}^ááÜ^•^æ!&@háæ}ááÔçc^••á [ }ÁCE} }~æ|ÁÜ^ [ ]!cÁ[-ÁCE&& [ { ]!•@ { ^}c•háæ}ááÜ^•~|c•

**Patent Applications Submitted**

Y^æ!K                      G€FF  
 CE&c^æ|K                      €

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2011   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Actual | I         | H        | F€    |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Ô|æ••ð& [ ~!•^

**Year**                      **Actual**  
 G€FF                              J

**Output #2**

**Output Measure**

Ô [ ]~^!^}&^

**Year**                      **Actual**  
 G€FF                              I

**Output #3**

**Output Measure**

Ô [ ]•~|cæcá [ ]

**Year**                      **Actual**  
 G€FF                              FÍGÍ

**Output #4**

**Output Measure**

Ô [ ]•~ { ^!ÁÜ~ à|ð&cá [ ]

**Year**                      **Actual**

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]clÖ [ { ää}^äáÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !cÄ[-ÁCE&& { }]|i•@ { ^}c•hæ}ä!Ü^•~|c•

G€FF

I€

**Output #5**

**Output Measure**

Ö^ { [ ]•c|æcä [ ]

**Year**

**Actual**

G€FF

ÎH

**Output #6**

**Output Measure**

Öä•&~••ä [ ]Ä\*! [ ~ ]

**Year**

**Actual**

G€FF

HG

**Output #7**

**Output Measure**

Òä~&æcä [ ]æ|ð^çæ|~æcä [ ]Ää}•c!~ { ^}c

**Year**

**Actual**

G€FF

G

**Output #8**

**Output Measure**

Ò|^&c! [ ]ä&ÄÖ [ { { ~ }ä&æcä [ ]ð]@ [ ]^

**Year**

**Actual**

G€FF

ÏGH

**Output #9**

**Output Measure**

Øä^|ä!äæ^ð-æä!

**Year**

**Actual**

G€FF

Ï

**Output #10**

**Output Measure**

Øä^|ä!ä•äc^!çä•äc

GEFFAW}äç^!•ic^Á[-ÁX^! { [ ]}cÁÔ [ { ää}^äáÜ^•^æ!&@háæ}á!Öçc^}•ä [ }ÁCE} } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]}|ä•@ { ^}c•háæ}á!Ü^•~|c•

| Year | Actual |
|------|--------|
| GEFF | FFH    |

**Output #11**

**Output Measure**

Ø~ }äâ} \*Á!^~^•c  
P [cÁ!^ [ !cä} \*Á [ }Ác@ä•ÁU~c] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**Output #12**





**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME   |
|--------|--|
| F      | Q}&!^æ•^Äc@^Ä} ~ { ä^!Ä[-Ä-æ! { ^!•Ä , @ [ Ää { ]   ^ { ^ } cÄæcÄ ^æ•cÄ [ } ^Ä&! [ ] ä } *Ä } !æ&cä^Äc [ Ää { ] ! [ Ç^ &! [ ] Äæ } äÄ • [ ä Ä ] ! [ ä ~ &cäçäc^Äæ } äÄ , æc^!Ä ~ æ äc^ |
| G      | Q}&!^æ•^Äc@^Ä} ~ { ä^!Ä[-Ä- [ !^•cÄ [ , ] ^!•Ä , @ [ Ä ]  æ} Ä- [ !Ä , [ [ ä æ } ä•Ää ] Äc@^Ä!Ä^•cæc^•   |
| H      | Q}&!^æ•^Ää } Ä& [    æä [ !æcä [ ] Ä , äc@Äæ*^ } &^Äæ } äÄä } ä ~ •c!^Ä^!• [ ] } ^ Äc [ Äæä!Ä^••Ä-æ! { Ä•æ-^c^Äæ } ä ^ { ^!^*^ } &^Ä ] ! ^  æ!^ä } ^••                                 |
| I      | Q}&!^æ•^Ää } Ä} ~ { ä^!Ä[-Ä] ! [ *!æ { Ä } æ!cä&ä } æ } c•Ä , @ [ Ä { æ\^Ää } - [ ! { ^äÄ^Ä&ä•ä [ ] •Äæä [ ~cÄ&! [ ] ä } •~!æ } &^   |
| í      | Q}&!^æ•^Ää } Ä} ~ { ä^!Ä[-ÄcæçÄ•&@ [ [  Ä ] æ!cä&ä } æ } c•Ä•cæcä } *Ää { ] ! [ Ç^äÄæ&&~!æ&^Ä[-ÄcæçÄ!^ ] [ !cä } *Ä- [ ! c@^Ä!Ä& ä^ } c•   |
| î      | Q}&!^æ•^Ää } Ä} ~ { ä^!Ä[-ÄcæçÄ•&@ [ [  •Ä ] æ!cä&ä } æ } c•Ä } ä^!•cæ } ää } *Ä-^ä^!æ Äæ } äÄ•cæc^ÄcæçÄ æ , •Äæ } ä !^~ä!^ { ^ } c•   |
| ï      | Q}&!^æ•^Ää } Ä} ~ { ä^!Ä[-Ä-æ! { ^!•Äc@æçä^Ç^ [ ] ÄæÄ } ~c!ä^ } cÄ { æ } æ*^ { ^ } cÄ    æ } Ä- !Äc@^Ä!Ä-æ! {  |
| ì      | Q}&!^æ•^Äc@^Ä} ~ { ä^!Ä[-Ä-æ! { ^!•Ä , @ [ Ää { ]   ^ { ^ } cÄæcÄ ^æ•cÄ [ } ^Ä&@æ } *Ää } Ä } ~c!ä^ } cÄ { æ } æ*^ { ^ } c [  æ } Ä ] !æ&cä&^•   |
| J      | Q}&!^æ•^Äc@^Ä} ~ { ä^!Ä[-Ä ^*ä• æc [ !•Äæ } äÄ^Ää^Ä&ä•ä [ ] Ä { æ\!•Ä , @ [ Ää } &!^æ•^Ä } ä^!•cæ } ää } *Ä[- &~!^ } cÄ [ &æ æ*!ä&~ c~!æ Ää••^•  |
| F€     | Q}&!^æ•^Ää äç^!^Ä[-Ä!^*æ } ä&Ääæ!^Ää } - [ ! { æcä [ ] Äc [ Ääæä!^Ä-æ! { ^!•Äæ&! [ ••Äc@^Ä } æcä [ ] Äc@æçä• æ&&^••ä!^Ä!^ äæà!^Ä&!^äà!^Äæ } äÄ ] Èc [ Èäæc^È                           |
| FF     | Q}&!^æ•^Ää } Ä} ~ { ä^!Ä[-ÄTæ•c^!ÄÖæ!ä^ } ^!Ä ] æ!cä&ä } æ } c•Ä^æ! } ä } *Ä^!cä-ä&æcä [ ]   |
| FG     | ä}&!^æ•^Ää } Äc@^Ä} ~ { ä^!Ä[-Ä-æ! { ^!•Ä , @ [ Ää { ] ! [ Ç^Ä ] æ•c~!Ä^ { æ } æ*^ { ^ } cÄ ] !æ&cä&^•   |
| FH     | Q}&!^æ•^Ää } Ä} ~ { ä^!Ä[-Ä- [ !^•cÄ [ , ] ^!•ÄÄ { æ } æ*^!•Äæ } äÄ~•^!•Ä , @ [ Ä { æ\^Ä^c^Ä!Ää^Ä&ä•ä [ ] •Äæä [ ~c - [ !^•c•Ä~•ä } *Ä•c~ { ] æ^Ääææ                                   |
| FI     | Q}&!^æ•^Ää } Äc@^Ä} ~ { ä^!Ä[-Ä- [ !^•cÄ [ , ] ^!•Ä•æçä } *Ä { [ ] ^Äc@! [ ~*Ä~•^Ä[-Ä , !äcc^ } Ä& [ ] c!æ&c•Ä- [ ! cä { ä^!Ä•æ!^•   |
| Fí     | B~ { ä^!Ä[-Ä^ } c^! ] !ä•^•Äçæ !^æä^Ä~•ä } *Ä!^& [ { { ^ } ä^ÄÄ ] !æ&cä&^•Dc@æçÄ~•^ÄÖçc^ } •ä [ ] & [ ] •~ cæcä [ ] Äc [ Äæ••^•Dä } - [ ! { Ää~•ä } ^••Ää^Ä&ä•ä [ ] •                  |
| Fî     | B~ { ä^!Ä[-Ä& ä^ } c^!^Ä , @ [ Ä@æç^Äæä [ ] c^äÄ [ ] ^Ä [ !Ä { [ !^ÄQÜTÄ ] !æ&cä&^•Äc@æçÄä } &!^æ•^ ^ } çä! [ ] { ^ } çæ Ä•~cæä } æä!äc^   |
| Fï     | B~ { ä^!Ä[-Ä^ } c^! ] !ä•^•Äc@æçÄæä [ ] cÄæÄ!^& [ { { ^ } ä^ÄÄ ] !æ&cä&^Ä!^•~ cä } *Ää } Ää } &!^æ•^äÄ!^Ç^ } ~^• æ } äD [ !Ä!^ä~^Ä& [ •c•  |



GEFFAW)äç!•äc^Ä[-ÄX^! { }clÖ { ää}^äaÜ^•^æ!&@kæ)ä!Öcc^••ä [ ACE) } ~æ|äÜ^ [ !cÄ[-ÄCE&& { }j!•@ { ^}c•kæ)ä!Ü^•~|c•

|    |  |
|----|--|
| FÌ | Úæ!cä&ä]æ)c•Á, ä Ä@æç^Ä*æä}^äÄ\ [ ,  ^ä*^Ä [ }Ä@ [ , Äc [ Ä*! [ , Ä [ !*æ}ä&Ä! [ ] •Äç^É*ÉÄæ [ ] ^•ÉÄ*!æä}•D   |
| FJ | CEÄ*!^æc^!Äçæ!ä^c^Ä[-Ä]! [ ä~&^Äæçæ æä ^ÄæcÄ@ [ { ^É   |
| G€ | Þ~ { à^!Ä[-Ä-æ! { •Äc@æcÄ]  æ}Ä- [ !Äæ} äÄä}& [ ! ] [ !æc^Ää! [ •^&~  äc^ÉÄ•æ-^c^Äæ} äÄ] !^ç^} cæcäç^Ä { ^æ•~!^•   |
| GF | Øæ! { ^!•Ä, ä Ää [ ] ^ { ^}cÄ•æ-^c^Ä { ^æ•~ ^•ÉÄÉ^ÉÄÜÜÜÜÄ [ ] Äc!æ&c [ !•  |
| GG | Øæ! { ^!•Ä, @ [ Ää { } ^ { ^}cÄæÄ}^, Ä] !æ&cä&^Äc [ Ä^ä^*ä}Ä] ! [ ä~&cä [ }Ä[-Ä [ !Ää { }! [ ç^Ä&~! ^}cÄ [ ä ^•^ä ]! [ ä~&cä [ }Ä^ä ^äÄæ} äÄ~ ~æ äc^                               |
| GH | Ö! [ , ^!•Äæä [ ]cä} *Ä}^, Äçæ!ä^cä^•  |
| GI | Þ~ { à^!Ä[-Ää} ääçä~æ •Ä, @ [ Ä&@æ} *^Äc@^ä!Ä*æ!ä^}ä} *Ä] !æ&cä&^•Äc [ Ä!^ä~&^Ä*æ!ä^}ä} *Ää} ] ~c•   |
| GÍ | Þ~ { à^!Ä[-Ä]æ!cä&ä]æ)c•Á, @ [ Ä* [ Ä [ ] Äc [ Ä•cæ!cÄæÄ~•ä}^••Ä, äc@ä}ÄF!Ä { [ ]c@•Ä[-Ä& [ ~ ^•Ä& [ { } ^cä [ }   |
| GÎ | Þ~ { à^!Ä[-Ä]æ!cä&ä]æ)c•Á, @ [ Ä { æ\^Äæ}Ää}- [ ! { ^äÄ^Ä&ä•ä}Äc [ Ä] [ cÄ•cæ!cÄæÄ~•ä}^••Äæ-c^! & [ { } ^cä] *Äc@^Ä& [ ~ ^•^   |
| GÏ | Þ~ { à^!Ä[-Ä-æ! { ^!•Ä, @ [ Ä, ä Ä*! [ , Äæ} äÄ { æ!\^cÄ { ^ä^æ} •Ä- [ !Ä] [ &æ Ä-^äÉÄ [ ä Ä] ! [ ä~&cä [ }Ä [ !Ä^ç [ !c { æ!\^cÄc [ Ää] &!^æ•^Ä-æ! { Ää} & [ { ^                  |
| Gì | Þ~ { à^!Ä[-Ä-æ! { ^!•Ä, @ [ Ä, ä Ä*! [ , Äæ} äÄ] ! [ ä~&^Ä^} ^!~^Ä& [ ] •Äæ} äÄc!æ} •- [ ! { Ää}c [ Ä^} ^!~^ ]! [ ä~&c•  |
| GJ | Þ~ { à^!Ä[-Ä]æ!cä&ä]æ)c•Áæ••ä} *Äc@^Ä!^~~ä!^äÄæ [ ] ä&æc [ !•Ä ä&^} •ä} *Äc^•c   |
| H€ | Þ~ { à^!Ä[-Ä-æ! { ^!•Ä, @ [ Ää { } ^ { ^}cÄæÄ}^, Ä] !æ&cä&^Äc [ Ä^ä^*ä}Ä] ! [ ä~&cä [ }Ä [ !Äc [ Ää { }! [ ç^Ä&~! ^}c [ !*æ}ä&Ä& [ !Ä] ! [ ä~&cä [ }Ä^ä ^äÄæ} äÄ~ ~æ äc^           |
| HF | Þ~ { à^!Ä[-Äæ} ] ^Ä*! [ , ^!•Ää}c^!^•c^äÄä} Äc@^Ä-^æ•ää äc^Ä[-Ä [ !*æ}ä&Ä] ! [ ä~&cä [ ]É  |
| HG | Ö) @æ} &^ { ^}cÄ [-Äæ*!ä&~ c~!æ Ä] ! [ ä~&cä [ }Ä, äc@Ä!^ä~&^äÄ&@^ { ä&æ Ä~•^É   |
| HH | Ö) @æ} &^Äc@^Ä•~cæä} æä äc^Ä [-Äc@^ÄWÜÄ- [ [ ä!•~•c^ { Äæ} äÄ!~!æ Ä& [ { { ~} äcä^•Ä^Ä- [ •c^!ä} * •~cæä} æä ^Äæ*!äÉÄ- [ [ äÄ^}c^! ]! ä•^•É  |
| HI | Ö-^&c•Ä [-Äçæ!äæcä [ }Ää}Ä] æc@ [ *^} Ää^c^cä [ }Äæ} äÄ*ä* }æ ä} *Ä] æc@ , æ~•Ä [ ]Ä!^•ä•cæ} &^Äc [ Ää [ çä] ^ { æ•cäcä•É  |
| HÍ | Ö^ç^! [ ] { ^}cÄ [-Äc^&@} ä&æ Äc!æä}ä} *Äæ} äÄ~ ] ] [ !cÄ- [ !ÄCE*!ä&~ c~!æ ÄÜ^!çä&^ÄÜ! [ çä^!•Äæ} äÄØæ! { ^!• ä} ÄÖ^!cä-ä^äÄÜ! *æ} ä&ÄÖæä!^ÄÜ! [ ä~&cä [ }ÄÜ~•c^ { •Äc@! [ ~*•@   |
| HÎ | Ö-^&c•Ä [-Ä•æ]Ä]!^& [ ] &^}c!æcä [ }Ää^Ä!^ç^!•^Ä [ { [ •ä•Ä [ }Ä { æ}  ^Ä•^~ ]Ä&@^ { ä&æ Ä& [ { } ^cä [ } æ} äÄ- æç [ !É   |
| HÏ | Ö^}^•äc•Ä [-Ä [ ]Ä-æ! { Ä& [ •~•c^ { Ä•^!çä&^Ä& [ ] •^!çæcä [ }Äæ} äÄæ•••• { ^}cÄ [-Ä, æc^!Ä~~æ äc^ÄÖTÜÜ æ} äÄä} } [ çæcäç^Ä] !æ&cä&^•Ä [ ]Ä• { æ Äæ} äÄ { ^äa~ { Ä•ä: ^•Ä-æ! { •É |

G€FFÄW)äç^!•äc^Ä[ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^}•ä [ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ ]|ä•@ { ^}c•hæ}ä!Ü^•~|c•

|    |   |
|----|---|
| HÌ | Üc!æc^*ä^•Äc [Ä]ä { äcÄ!^ä~&cä [ ]•Ää}Ä { æ} ^Ä•æ]Ä^ä^ äÄä}Äçæ&~ { Ää}•cæ  æcä [ ]•È  |
| HJ | Ö^c^&cÄæ} äÄ^çæ ~æc^Ä*^ ^ ^cä&Ää~^!^ ^&^•Ä^c , ^ ^Äæ}ä { æ •Ää}Ä*^ ^ ^•Ää}ç [  ç^äÄä}Ä!^• [ ]•^Äc [ ä}~^&cä [ ]È                    |
| I€ | Q { }! [ç^Ä^& [ ] { { ä&Äæ} äÄ^}çä! [ ] { ^}cÄä}Ä•~•cæä}æä äc^Ää}Äc!^Ä-!~äcÄ]! [ ä~&cä [ ]Äc@! [ ~*@Ä&@æ} *^• ä}Ä! [ cÄ•c [ &^Ä~•^È |
| IF | Öçæ ~æcä} *ÄXVÄÖ!æ••ÈÖæ•ä!ÄŠç^•c [ &^Ä-æ! { •Äæ} äÄæ*!ä&~ c~!æ Ä [  ä&^Ää { } ä&æcä [ ]•È   |
| IG | Øæ! { Äc [ Ää}•cäc~cä [ ]•LÄ [ ] [ !c~}äcä^•Ä- [ !ÄX^! { [ ]cÄç^•^cæä ^Ä-æ! { ^!•È  |
| IH | Ä^ , ÄCE] ]! {æ&@Äc [ , æ!ä•Ä { æçä { ä:ä} *Ä { æ} ^Ä•æ]Ä^ä^ ä•È  |
| II | Ä^c , [ !\•Ää { }! [ç^Äc@^Ä~^&cäç^}^••Ä[-Ä]! [ { [cä] }Ä- [ !ÄX^! { [ ]cÄYä}Ä!Ü! [ ä~&^!•   |
| IÍ | Ö@æ!æ&c^!ä:æcä [ ]Ä[-Äc@^Ä! [ ^Ä[-Äc@^Ä { ^ää&æ* [ Äc!~ }&æc~ æÄ*ä!æ~^Ä*^ ^ ^Ää}Ä [ çääæcäç^Ä•c!^••È                                |
| IÎ | Öä [ [ *ä&æ ÄÖ [ ]c! [  Ä[-Äc@^ÄCE•äæ}ÄŠ [ ] * @ [ ! ] ^äÄÖ^c ^ÄKÄÖ!æ , ä} *ÄØ! [ { ÄQ} ää*^ ^ [ ~•ÄÜ [ ~!&^•                       |

**Outcome #1**

**1. Outcome Measures**

Q}&!^æ•^Äc@^Ä}~ { ä^!Ä[-Ä-æ! { ^!•Ä , @ [ Ää { ]|^ { ^}cÄæcÄ|^æ•cÄ [ ]^Ä&! [ ]ä} \*Ä}!æ&cä&^Äc [ Ää { }! [ç^Ä&! [ ]Äæ}ä • [ ä]Ä]! [ ä~&cäçäc^Äæ} äÄ , æc^!Ä~~æ|äc^

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ ]  
 ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ ]ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

|             |               |
|-------------|---------------|
| <b>Year</b> | <b>Actual</b> |
| G€FF        | FG            |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ}äÄÖçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ [!cÄ[-ÄCE&& [ { ]!ä•@ { ^}c•Äæ}äÄÜ^•~|c•

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area  |
|---------|---|
| FHH     | Ú [ [     ~ cä [ ] ÄÜ! ^ç^ } cä [ ] Äæ } äÄT äcä * äcä [ ] }                  |
| Î€F     | Ò& [ ] [ { ä&•Ä[-ÄCE*!ä&~ c~!æ ÄÜ! [ ä~&cä [ ] Äæ } äÄÖæ! { ÄTæ } æ*^ { ^ } c |
| Î€G     | Ó~•ä}^••ÄTæ}æ*^ { ^ } cÄÄÖä}æ} &^ÄÄæ} äÄVæçcä [ ] }                           |

**Outcome #2**

**1. Outcome Measures**

Q}&!^æ•^Äc@^Ä}~ { ä^!Ä[-Ä- [!^•cÄ [ , ]^!•Ä , @ [ Ä ] |æ } Ä- [ !Ä , [ [ ä|æ } ä•Ää } Äc@^ä!Ä^•cæc^•

Þ [ cÄÜ^ [ [!cä } \*Ä [ ] Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

**Outcome #3**

**1. Outcome Measures**

Q}&!^æ•^Ää}Ä& [ | | æä [ !æcä [ ] Ä , äc@Äæ\*^ } &^Äæ } äÄä } ä~•c!^Ä^!• [ ] } ^|Äc [ Äæää!^••Ä-æ! { Ä•æ-^c^Äæ } ä  
^ { ^!^•^ } &^Ä ] !^ } æ!^ä } ^••

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ ] }

**3a. Outcome Type:**

Ô@æ} \*^Ää}ÄCE&cä [ ] ÄU~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | F€H    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

G€FFÄW}äç^!•öc^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•Äæ}ä!Ü^•~|c•

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area   |
|---------|--|
| Î€F     | Ö& [ ] [ { ä&•Ä[-ÄCE*!ä&~ c~!æ ÄÜ! [ ä~&cä [ }Äæ}ä!Öæ! { ÄTæ}æ*^ { ^}c |
| Î€G     | Ó~•ä}^••ÄTæ}æ*^ { ^}cÄÄÖä}æ}&^ÉÄæ}ä!Væçæcä [ }                         |

#### Outcome #4

##### 1. Outcome Measures

Q}&!^æ•^Ää}Ä}~ { à^!Ä[-Ä]! [ \*!æ { Ä}æ!cä&ä}æ}c•Ä, @ [ Ä { æ\^Ää}~! { ^äÄä^&ä~ä [ ]•Äæà [ ~cÄ&! [ ] Ää}•~!æ}&^

▷ [cÄÜ^] [ !cä} \*Ä [ ] Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

#### Outcome #5

##### 1. Outcome Measures

Q}&!^æ•^Ää}Ä}~ { à^!Ä[-ÄcæçÄ•&@ [ [ |Ä]æ!cä&ä}æ}c•Ä•cæcä} \*Ää { ]! [ ç^äÄæ&&~!æ&^Ä[-ÄcæçÄ!^] [ !cä} \*Ä- [ !Äc@^ä! &|ä^}c•

▷ [cÄÜ^] [ !cä} \*Ä [ ] Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

#### Outcome #6

##### 1. Outcome Measures

Q}&!^æ•^Ää}Ä}~ { à^!Ä[-ÄcæçÄ•&@ [ [ |•Ä]æ!cä&ä}æ}c•Ä~} ä^!•cæ} ää} \*Ä-^ä^!æ|Äæ} äÄ•cæc^ÄcæçÄ|æ, •Äæ} ä !^~ä!^ { ^}c•

##### 2. Associated Institution Types

ÄF! ÎGÄÖçc^}•ä [ }

##### 3a. Outcome Type:

Ö@æ} \*^Ää}ÄS} [ , |^ä\*^ÄU~c& [ { ^ÄT^æ•~!^

##### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| G€FF | HI Í   |

##### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]}c!Ö [ { ää}^äáÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} }~æ|áÜ^ [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•hæ}ä!Ü^•~|c•

## Results

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                 |
|---------|--|
| Î€G     | Ó~•ä}^••ÄTæ}æ*^ { ^}cÉÄØä}æ}&^ÉÄæ}ä!Væçæcä [ } |

### Outcome #7

#### 1. Outcome Measures

Q}&!^æ•^há}Ä}~ { ä^!Ä[-Ä-æ! { ^!•Äc@æcÄä^ç^ [ [ ]ÄæÄ}~c!ä^}cÄ { æ}æ\*^ { ^}cÄ] |æ}Ä-[ !Äc@^ä!Ä-æ! {

#### 2. Associated Institution Types

ÄF! ÎGÄÖçc^}•ä [ }

#### 3a. Outcome Type:

Ö@æ}•^há}ÄCE&cä [ }ÄÜ~c& [ { ^ÄT^æ•~!^

#### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| G€FF | GH     |

#### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                 |
|---------|--|
| FHH     | Ú [     ~ cä [ }ÄÜ!^ç^}cä [ }Äæ}ä!Täcä*æcä [ } |

### Outcome #8

#### 1. Outcome Measures

Q}&!^æ•^Äc@^Ä} ~ { ä^!Ä [-Ä-æ! { ^!•Ä , @ [ Ää { ] | ^ { ^} cÄæcÄ|^æ•cÄ [ ] ^Ä&@æ} \* ^Ää} Ä} ~ c!ä^} cÄ { æ} æ\*^ { ^} cÄ | |æ} ]!æ&cä&^•

#### 2. Associated Institution Types

ÄF! ÎGÄÖçc^}•ä [ }

#### 3a. Outcome Type:

Ö@æ} \* ^Ää} ÄCE&cä [ ] ÄÜ ~ c& [ { ^ÄT^æ•~!^

#### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| GEFF | GG     |

#### 3c. Qualitative Outcome or Impact Statement

##### Issue (Who cares and Why)

Þ ~ c!ä^} cÄTæ} æ\*^ { ^} cÄÜ|æ} •Äæ!^Ää^ç^ [ ] ^Ää^Ä-æ! { ^!•ÉÄÄV@^Ä} ! [ ç!ä^ÄäæÄ•c!æc^\*~Ä- [ !Ä-æ! { ^!•Äc@æc ] ! [ c^Ä&c•Ä^} ç!ä! [ ] { ^} cÄæ} äÄ! [ [ \ •ÄæcÄ^Ä•cÄ ] !æ&cä&^•Ä- [ !Ä { ^Äcä} \*Ä&! [ ] Ä} ~ c!ä^} cÄ } ^Ää•ÉÄQ-Ä} ~ c!ä^} c { æ} æ\*^ { ^} cÄä•Ä} ! [ ] ^!|^Ä^ { ] | ^Ää [ ] ÄæÄ-æ! { ÄäcÄ&æ} Ä!^Ä ~ ^ÄÄ [ ç^!æ!|Ä-æ! { Ä} ! [ ä ~ &cä [ ] Ä& [ •c•É ä { ] ! [ çä } \*Ä-æ! { Äç!æä!äç^ÉÄØ^!cä!ä: ^!Ä} !ä&^•Äæ!^ÄäæÄ { æb [ !Ä^ç^ ] ^} •^Ä [ ] Ä { [ •cÄ& [ ] ç^!} cÄ [ ] æ!Ä-æ! { •ÉÄÜ [ ä! c^Äcä} \*Äæ} äÄæä [ ] cä} \*Ä { æ} ~!^Ä { æ} \*^ { ^} cÄc^&@} ä ~ ^•Ä&æ} Ä@^! ] Ä { ä} ä { ä: ^Ä-^!cä! : ^!Ä} ~!&@æ•^•É

##### What has been done

CEÄ-æ! { ^!Ä} ~ c!ä^} cÄ { æ} æ\*^ { ^} cÄ& [ ~!•^Ä@æ•Ää^Ä} Ää^ç^ [ ] ^Ää^ÄWX^TÄÖçc^}•ä [ ] ÉÄV@^Ä& [ ~!•^ c^Äæ&@^Ä-æ! { ^!•Äc@^Ä} !ä} &ä] |^•Äæ} äÄæ ] ]!ä&æcä [ ] •Ä [-Ä} ~ c!ä^} cÄ { æ} æ\*^ { ^} cÄÄØæ! { •Äcæ\^Äc@^Ä& [ ~!•^ æ} äÄä^ç^ [ ] ÄæÄÞTÜÄc@æcÄ { ^c•Ä•cæc^Äæ} äÄ-^Ä!æ!Ä!^ ~ ä!^ { ^} c•ÉÄÖæ&@A^æ!Äc@^Ä-æ! { •Ää} Äc@^Ä} ~ c!ä^} cÄ { æ} æ\*^ { ^} cÄ! [ !æ { Ä , [ !Äc [ Ä ~ ] äæc^Äc@^Ä!Ä] |æ} •É

##### Results

Ü ~ &&^••~|Ää { ] | ^ { ^} cæcä [ ] Ä [-Ä [ ] ^Ä [ !Ä { [ !Ä^!^ { ^} c•Ä [-Äc@^Ä] |æ} Ä&æ} Ä} ! [ ç!ä^Ää { ] ! [ ç^ÄÄÄ! [ ] Ä^ä^!ä• æ} äÄ•æçä } \*Ä [ ] Ää } ] ~ c•Ä• ~ &@Äæ•Ä-^!cä!ä: ^!ÉÄÄU} Ä!^Ä!Ä-æ! { Ä^çæ { ] | ^Äc@^Ä-æ! { Ä , ^} cÄ-! [ [ Äæç^!æ\*ä } \*ÄFJ c [ ÄG | Äc [ ] •Ä [-Ä& [ !] Ä•ä!æ\*^Ä] ^!Äæ&!^Ää^Äæ } ] ] ^ä } \*Ä|^••Ä-^!cä!ä: ^!LÄc@^Ä•c [ ] ] ^Ää~•ä } Ä& [ { { ^!&äæ! -^!cä!ä: ^!Ä [ ] Äc@^Ä!Ä@æ^Ä-ä^!ä•Ä} •ä } \*Äcä { ^!^Ä { æ} ~!^Ä} äc! [ \*^} ÉÄæ} äÄc@^Äcæ\^Ä!^\*~|æ!Ä• [ ä!Äc^•c•ÉÄV@^Ä -æ! { Ä@æ•Ä^ç^ } æ} ä^ÄÄ@ä•Ä@^!äÄä^Ä!ÉÄ^ÄæäÄ , äc@ [ ~cÄ@æçä } \*Äc [ ÄæäÄÄ { [ !Ä!æ} äÄc [ Ä@æ!ç^ÄcÄ { [ !Ä-^ÄäÉ V@^Ä^Ä•cä { æc^Äc@^Ä-^Äæ!^Ä•æçä } \*Ää^c , ^Ä} ÄÄG [ ÉÉÉÉÄæ } äÄÄ [ ÉÉÉÉÄ ] ^!Ä^Äæ!Ä [ ] Ä-^!cä!ä: ^!Äæ! [ ] ^ÉÄÄV@ä• -æ! { Ää•Ä• ~ ä•cæ } cäæ!|^Ä { [ !Äç!æä!^ÉÄä•Ä} ! [ c^Äcä } \*Ä• [ ä!Äæ } äÄ , æc^!Äæ } äÄ^Ä] ä } \*Äæ&!^•Ä [-Äæ\*!ä&~|ç^!æ] |æ} äÄä} Äcæ&cÉÄÄGÄ-æ! { •Ä@æç^Ää { ] | ^ { ^} c^ÄäÞTÜÄc@ä•Ä-^Äæ!ÉÄÄV@ä•Ä} ! [ !æ { Ä , ä!Ä& [ ] cä } ~ ^Ä-!ÄX^! { [ ] c -æ! { ^!•É

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area |
|---------|----------------|
|---------|----------------|

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ}äÄÖçc^••ä [ }ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]}ä•@ { ^}c•Äæ}äÄÜ^•~|c•

FHH Ú [ || ~ cä [ } ÄÜ! ^ç^ } cä [ } Äæ } äÄ T äcä \* æcä [ }

**Outcome #9**

**1. Outcome Measures**

Q} &! ^æ•^Äc@^Ä} ~ { à^!Ä [-Ä|^\*ä•|æc [ !•Äæ} äÄ \ ^ Ä ä^ & ä• ä [ } Ä { æ \ ^! • Ä , @ [ Ä ä } &! ^æ•^Ä ~ } ä^! • cæ } ä ä } \* Ä [-Ä & ~ ! ! ^ } c  
| [ &æ|Äæ \* ! ä & ~ |c ~ !æ|Ä ä • • ~ ^•

**2. Associated Institution Types**

ÄF Ì Î G Ä Ö ç c ^ } • ä [ }

**3a. Outcome Type:**

Ô@æ} \* ^ Ä ä } Ä S } [ , | ^ ä \* ^ Ä Ü ~ c & [ { ^ Ä T ^ æ • ~ ! ^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | F€     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area  |
|---------|---|
| Î€F     | Ò& [ ] { { ä&•Ä [-ÄCE*! ä& ~  c ~ !æ ÄÜ! [ ä ~ &cä [ } Äæ } äÄÖæ! { Ä T æ } æ * ^ { ^ } c |

**Outcome #10**

**1. Outcome Measures**

Q} &! ^æ•^Ä ä^ |äç^! ~ Ä [-Ä [ ! \* æ } ä&Ä ä ä ä! ~ Ä ä } - [ ! { æcä [ } Äc [ Ä ä ä ä! ^ Ä - æ! { ^! • Äæ&! [ • • Äc@^Ä } æcä [ } Äc@æcÄ ä • Äæ&&^•• ää|^É  
! ^ | ä ä ä|^É Ä Ä! ^ ä ä ä|^Äæ } ä Ä ~ ] Èc [ È ä æ c^É

P [ cÄÜ^ [ ! cä } \* Ä [ } Äc@ä•ÄÜ ~ c & [ { ^ Ä T ^ æ • ~ ! ^

G€FFÄW}äç^!•ic^Ä[ÄX^! { [ ]clÖ [ { ää}^äÄÜ^•^æ!&@kæ}ä!Öçc^••ä [ÄCE} } ~æ!Ü^ [ [!cÄ[-ÄCE&& { [ ]!•@ { ^}c•kæ}ä!Ü^•~|c•

**Outcome #11**

**1. Outcome Measures**

Q}&!^æ•^Ä}Ä} ~ { ä^!Ä[-ÄTæ•c^!ÄÖæ!ä^}^!Ä]æ!cä&ä]æ}c•Ä^æ!}ä} \*Ä^!cä-ä&æcä [ }

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ }

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ ÄÜ ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | F€I    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ö ~^Äc [Ä^æ•^Äæ&&^••Äc [Ä [ç^!Äc@^Ä& [ ~ }c^!Ä] ; [ ä ~ &c•kæ} äÄæäç^!cä : ä } \*ÉÄ@ [ { ^ [ , } ^!•Ä [-c^} Ä ~ •^ ä } •^&cä&ä^Ä^Äæ} äÄ@^! ää&ä^Ä^Ä [ ] Äc@^ä!Ä|æ , } •Ä , äc@ [ ~ cÄc@ [ ~ \*@cÄc [ Ä ] ä } &ä ] |^•Ä [-Ää] c^!æc^ÄÄ ] ^•c { æ } æ \* { ^ } cÄçÜTDE

**What has been done**

V [Ä { æ\^Ä@ [ { ^ [ , } ^!•kæ , æ!^Ä [-Äc@^Ää••^•Äæ! [ ~ } äÄ ] ^•cä&ä^Ä^•æ\*^Äæ•Ä , ^||æ•Ä&~|c~|æ|Ä] |æ&cä&^• c@æcÄ&æ}Ä!^ä ~ &^Äc@^Ä}^ÄäÄ [ !Ä!^|æ} &^Ä [ ] Ä ] ^•cä&ä^Ä^•ÉÄc@^ÄTæ•c^!ÄÖæ!ä^}^!Ä] ! [ \*!æ { Ä@æ•Ä ] |æ&^ä { ~ &Ä^ [ ] @æ•äÄ [ ] Ä ~ •ä } \*Ä ] |æ&cä&æ|Ä { ^c@ [ ä•Ä [-ÄQÜTÄ- [ !Ä@ [ { ^Ä\*æ!ä^}Äæ} äÄ\*! [ ~ } ä•ÉÄV@^ÄÄæ] • [Ä|^æ!} æä [ ~ cÄ& [ ~ cä ] \*Äæ } äÄæ ] ; [ ] |äæc^Ä ] ^•cÄ { æ } æ \* ^ { ^ } cÄæ&cä [ ] É

**Results**

Öæ•^äÄ [ ] ÄæÄ ] [ •cÉ ] !^•^} cæcä [ ] Ä • ~ !ç^Ä [-ÄTæ•c^!ÄÖæ!ä^}^!•Ä&|æ••Äæcc^} ä^•ÉÄJÄ] ^!&^} cÄä } ää&æc^ä c@^Ä|^æ!} ^äÄ • [ { ^c@ä } \*Ä } ^ , Äæä [ ~ cÄ ~ •cæä } æä|^Ä|æ , } Ä&æ!^ÉÄÄCE|c@ [ ~ @Äc@^Äc^! { ÄQÜTÄ@æ•Ää^ } æ! [ ~ } äÄ- [ !Ä [ç^!ÄHÉÄ^æ!•ÉÄ | € ÄÄ@æäÄ ] [ cÄ@^æ!äÄ [-Äc@^Äc^! { Ä ~ } cÄ|Äc@ä•Ä ] !^•^} cæcä [ ] ÉÄV@^ÄTæ•c^! Öæ!ä^}^!Äç [ ] ~ } c^!^!•Ä•cæ~Äc@^ÄÖæ!ä^}Ä@^!|ä}^Äc [ Ä ] ; [ çä^ÄX^! { [ ] c^!•Ä , äc@Ää } - [ ! { æcä [ ] Ä [ ] \*æ!ä^}ä } \*Äæ } äÄQÜTÄ•c!æc^\*ä^•ÉÄÄQ} ÄG€FFÄæÄ!æ } ä [ { Ä • ~ !ç^Ä [-Ä- [ ! { ^!Ä&æ||^!•Ä•@ [ , ^äÄc@æcÄJÄ] Ä [-Äc@^Ä FG|Ä&æ||^!•Ä { æä^ÄæÄ&@æ } \*^Ää} Ä\*æ!ä^}ä } \*Ä ] |æ&cä&^•Äæ•ÄæÄ!^•~|cÄ [-Ä|^æ!}ä } \*Äæä [ ~ cÄQÜTÄÄ^•c [ ] |æ&cä&^•É

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area                          |
|---------|---|
| GF1     | Q}c^!æc^ÄÄÜ^•cÄTæ}æ*^ { ^ } cÄÜ^•c^ { • |



G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ}ä!Öçc^••ä [ ]ÄCE} } ~ æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!i•@ { ^}c•Äæ}ä!Ü^•~|c•

**Outcome #12**

**1. Outcome Measures**

ä}&!^æ•^Ää}Äc@^Ä}~ { ä^!Ä[-Ä•æ! { ^!•Ä, @ [ Ää { ]! [ ç^Ä]æ•c^!^Ä { æ}æ\*^ { ^}cÄ]!æ&cä&^•

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ ]

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ ]ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | GJ€    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Øæ! { ^!•Ä { ~cÄ^Ä}! [-äcæà|Äc [ Ä•cæ^Ää}Ää~ •ä}^••ÉÄÄÖ!æ:ä} \*Ä { æ}æ\*^ { ^}cÄ&æ}Ä]! [ çä^ÄæÄ\ ^Äc [ ]! [-äcæàä|äc^ÉÄ!^ä~ &ä} \*Ä-^^äÄ& [ •c•Äæ}ä!Ää { ]! [ çä} \*Ä@^!äÄ@^æ|c@ÉÄÄTæ}æ\*^ { ^}cÄ^~ [ !c•Äæ~^&c ^}çä! [ ] { ^}cæ|Ä@^æ|c@Äæ}ä!Ää { ]! [ ç^Ä, æc^!Äæ}ä!Ä• [ ä|Ä~ ~æ|äc^É

**What has been done**

Q}ÄX^! { [ ]}cÄc@^ÄCE} } ~ æ|ÄÖ!æ:ä} \*ÄÖ [ ]-^!^} &^Äæcc!æ&c•Ä [ ç^Ä!ÄH€Äæcc^}ä^•-äc@äc^É

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!ä•@ { ^}c•hæ}ä!Ü^•~|c•

**Outcome #13**

**1. Outcome Measures**

Q}&!^æ•^hâ}Ä}~ { ä^!Ä[-Ä- [ !^•cÄ [ , }^!•ÉÄ { æ}æ\*^!•hæ}ä!~•^!•Ä , @ [Ä { æ\^hâ^cc^!Äâ^&ä•ä [ }•hæä [ ~cÄ- [ !^•c•  
~•ä} \*Ä•c~ { ]æ\*^hâæcæ  
P [cÄÜ^] [ !cä} \*Ä [ }Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

**Outcome #14**

**1. Outcome Measures**

Q}&!^æ•^hâ}Äc@^Ä}~ { ä^!Ä[-Ä- [ !^•cÄ [ , }^!•Ä•æçä} \*Ä { [ ]^Äc@! [ ~\*Ä~•^Ä [-Ä , !äcc^}Ä& [ ]c!æ&c•Ä- [ !Äcä { ä^!  
•æ|^•  
P [cÄÜ^] [ !cä} \*Ä [ }Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

**Outcome #15**

**1. Outcome Measures**

P~ { ä^!Ä[-Ä^}c^! ]!ä•^•Äçæ!|^æâ^Ä~•ä} \*Ä!^& [ { { ^}ä^äÄ] !æ&ci&^•Dc@æcÄ~•^ÄÖçc^}•ä [ }Ä& [ ]•~|cæcä [ }Äc [ ]  
æ••^••Dä}~! [ { Ää~•ä}^••Äâ^&ä•ä [ ]•

**2. Associated Institution Types**

ÄF! ÎG!Öçc^}•ä [ }

**3a. Outcome Type:**

Ö@æ} \*^hâ}ÄCE&cä [ }ÄU~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | F!Ï    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area |
|---------|----------------|
|---------|----------------|

G€FFÁW)äç^!•ic^Á[-ÁX^! { [ ]}cÁÔ [ { ää)^äáÜ^•^æ!&@hæ)á!Ôçc^}•ä [ }ÁCE)}~æ|áÜ^] [!cÁ[-ÁCE&& [ { ]}|ä•@ { ^}c•hæ)á!Ü^•~|c•

Î€F            Ò& [ ] [ { ä&•Á[-ÁCE\*!ä&~|c~!æ|ÁÜ! [ ä~&cä [ }Áæ)á!Øæ! { ÁTæ}æ\*^ { ^}c  
Î€G            Ó~•ä}^••ÁTæ}æ\*^ { ^}cÉÁØä}æ)&ÉÁæ)á!Væçæcä [ ]

## 1. Outcome Measures

GEFFÄW}äç^!•äc^![-ÄX^! { [ ]cÄÖ { ää}^äÄÜ^•^æ!&@kæ}ä!Öçc^}•ä [ ACE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•kæ}ä!Ü^•~|c•

æ] ]!ä&æc [ !•Ää} &!^æ•^äÄ [ !Ä^•^æ}Ä~ •ä} \*ÄQÜTÉÄ [ !•äcäç^! ^Ää { ]æ&cä} \*Äc@^Ä^}çä! [ { ^}cÄæ}ä!@~ { æ} ^ç [ !•~!^Äc [ Ä&@^ { ä&æ}•É

#### 4. Associated Knowledge Areas

**KA Code Knowledge Area**

- FGH Tæ}æ\*^ { ^}cÄæ}ä!Ü~•cæä}æä!äc^Ä [-ÄØ [ !•cÄÜ^• [ ~!&^•
- GFF Q}•^&c•ÉÄTäc^•Éäæ}ä!Üc@^!ÄCE!c@! [ ] [ ä•ÄCE~^&cä} \*ÄÜ|æ}c•
- GFÍ Q}c^\*!æc^ä!Ü^•cÄTæ}æ\*^ { ^}cÄÜ^•c^ { •

#### Outcome #17

##### 1. Outcome Measures

▷~ { ä^!Ä [-Ä^}c^! ]!ä•^•Äc@æcÄæä [ ]cÄæÄ!^& [ { { ^}ä^äÄ}!æ&cä&^Ä!^•~|cä} \*Ää}Ää}&!^æ•^äÄ!^ç^}~^•Äæ}äD [ ! ^ä~&^Ä& [ •c•

##### 2. Associated Institution Types

ÄF! ÎGÄÖçc^}•ä [ }

##### 3a. Outcome Type:

Ö@æ} \*^Ää}ÄCE&cä [ }ÄÜ~c& [ { ^ÄT^æ•~!^

##### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| GEFF | H€F    |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

CE [ ] \*Ä, äc@Äc@^Ä}æc~!æ|Ä!^• [ ~!&^Ääæ•^ÉÄX^! { [ ]c•ÄCE\*!ä&~|c~!æ|Ä•^•c^ { Ää^ } ^}ä•Ä [ ]Äc@^Ä} ^ [ ]|Äc [ \^^ ]Äc@^Ä}ä!æ}ÄCE\*!ä&~|c~!^ÉÄÄTæ] |ÄÄ] ! [ ä~&cä [ ]ÉÄæ\*! [ Éc [ ~!ä• { Äæ} äÄ-æ! { ä} \*Äæ!^Äc [ ~\*@Ä~•ä}^••^•, äc@Ä}æ! [ ]Ä]! [-äcÄ { æ! \*ä} •Äæ} äÄ { æ} ^Äçæ!äæä!^•Ää^ [ ] äÄ& [ ]c! [ |Ä [-Äc@^Ä-æ! { Ä [ ]^!æc [ !ÉÄV^&@} [ | [ \*^æ} äÄä^•cÄ]!æ&cä&^•Ä&@æ} \*^Ää { ]! [ çä} \*Äc@^Äæä!äc^Äc [ Ä^] @æ} &^Äçäæä!äc^Ä [-Äc@^Ää~•ä}^••Äæ} äÄ]! [ c^&cÄäc• ä { ]æ&cÄ [ ]Äc@^Ä^}çä! [ ] { ^}cÉ

###### What has been done

V@^Ä|æ! \*^•cÄ}^!&^}cÄ [-ÄÖçc^}•ä [ ]c•Ä^~ [ !cÄä•Ä- [ &~^ÄÄ [ ]Ä^ä~&cä [ ]Äæ}ä!^•^æ!&@Ää}Ä~ ] [ !cÄ [-Äc@^æ\*!ä&~|c~!æ|Ä& [ { { ~}äc^ÉÄÖ~ [ !c•Ää} &|~ä^Ää~•ä}^••Ä { æ}æ\*^ { ^}cÉÄäç^!•ä-ä&cä [ ]Äc!æc^\*ä^•É { æ! \^cä} \*ÉÄ] |æ} }ä} \*ÉÄ^}çä! [ ] { ^}cæ|Ää~^••ÉÄ|äç^!c [ &\Ä { æ}æ\*^ { ^}cÉÄ [ &æ|Ä- [ ] äÄæ&&^••Äæ} ä { æ! \^cä} ^, Ä&! [ ] •Äæ} äÄ]! [ ä~&cä [ ]Ää^•cÄ]!æ&cä&^•ÉÄÄÜ! [ \*!æ { { ä} \*Äc!äç^!Äc [ Ä { ^ÄcÄc@^Ä} ^Ää•Ä [- ^ [ ~} \*ÉÄ [ |äÉÄ, [ { ^}ÉÄä^•ä} }ä} \*Äæ} äÄ { ~|cäÉ^\*^}^!æcä [ ]Ä-æ! { ^!•ÉÄæ} äÄ@ä•]æ} ä&Ä, [ !^!•Äæ} äÄc@^Ä!Äæä!äc^c [ Ä { ^Äc@^Ä!Ä} ^Ää•É

###### Results

Ö~•ä}^••Äçäæä!äc^ÉÄç^!Ää-Äc@æcÄ { ^æ}•Ää^ä} \*Äæä!Äc [ Ä { æä}cæä}Äæ\*!ä&~|c~!æ|Ä}ä!Ää}Äæ& [ !^Äçæ]~^Ä [-

GEFFAW)äç!•öc^Á[ÁX^! { [ ]cáÔ [ { ää }^äáÜ^•^æ!&@hæ}á!Ôçc^•ä [ ACE } } ~æ|áÜ^ [ [!cá[-ÁCE&& [ { ]!ä•@ { ^ }c•hæ}á!Ü^•~|c•

{ æ } ^ÁX^! { [ ] }c^!•ÉÁÔçæ { [ ]|^•Á[-Ác@^Á•~&&^••Ác@ä•Á^~æ!Á- [!ÁæÁ-^, Áæ\*!ä&~|c~!^!|^|æc^á!á~•ä } ^•••KÁæ  
Á!ÉDæ&!^Á•æçä } \*•Á~•ä } \*Á } [Écá|!Á& [! ]Á•^^áä } \*LæÁÁGÎÉ€€Áä } &!^æ•^Áä } Á! [! á~&^Á•æ|^•Áà^Á!Á-æ! { •  
[! \*æ } ä: ^á!á } ÁæÁØ [ [! á!P^c, [! \LæÁÁ!É!€€Áä } &!^æ•^Áä } Áæ } } ~æ|Á! [! á~&cá [ ]Á^æ! } ä } \*•Á ]^!ÁG!çÁF€€Á@ä\*•@  
c~ } } ^|LæÁÁ!ÉF!Dæ&!^Á•æçä } \*•Á ]|æ } cá } \*Á& [! ]Á~•ä } \*ÁÜ!^&á•ä [ ] ACE\*Ác^&@ [ [! \*^ÉÁØ [! Á [ ] ^Á-æ! { ^!Áæ-c^!  
[~•^ccä } \*Á@ä•Á~•ä ] { ^ }cÁ& [ •cÉÁc@ä•Á { ^æ }cÁæÁÁ!É€€Á•æçä } \*•Á [ç^!Á!Á^~æ!•ÉÁUç^!ÁH€€Áä } ä!ç!á~æ|•É  
á)-|^ } &^á!á^ÁWX^TÁÔçc^•ä [ ]Á! [! \*!æ { { á } \*Á@æç^Á^ç ] ^!á^ } &^á!áæ } Áä } &!^æ•^Áä } Áà~•ä } ^••Áç!æ!ä!äc^Áà^  
æ!á [ ]cá } \*Á [ ] ^Á [! Á [ [! ^!á!á^cÁ { æ }æ\*^ { ^ }cÁ•c!æc^\*á^•É

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area  |
|---------|---|
| Î€F     | Ò& [ ] [ { á&•Á[-ÁCE*!ä&~ c~!æ ÁÜ! [! á~&cá [ ] Áæ } á!ÁØæ! { ÁTæ }æ*^ { ^ }c |
| Î€G     | Ó~•ä } ^••ÁTæ }æ*^ { ^ }cÉÁØä }æ } &^ÉÁæ } á!Væçæcá [ ]                       |
| Î€I     | Tæ! \^cá } *Áæ } á!Öä•c!á!á~cá [ ]ÁÜ!æ&cá&^•                                  |

#### Outcome #18

##### 1. Outcome Measures

Úæ!cá&ä ]æ }c•Á, ä|!Á@æç^Á\*æ! }^á!á } [ , |^á\*^Á [ ]Á@ [ , Ác [Á\*! [ , Á [! \*æ } ä&Á! [ ] •Áç^É\*ÉÁæ ]|^•ÉÁ\*!æ! }•D  
P [cáÜ^ ] [!cá } \*Á [ ] Ác@ä•ÁU~c& [ { ^ÁT^æ•~!^

#### Outcome #19

##### 1. Outcome Measures

CEÁ\*!^æc^!Áçæ!ä^c^Á[-Á]! [! á~&^Áæçæ!æ!|ÁæcÁ@ [ { ^É  
P [cáÜ^ ] [!cá } \*Á [ ] Ác@ä•ÁU~c& [ { ^ÁT^æ•~!^

#### Outcome #20

##### 1. Outcome Measures

P~ { à^!Á[-Á-æ! { •Ác@æcÁ ]|æ }Á- [!Áæ } á!á } & [! ] [!æc^Á!á! [ •^&~!äc^ÉÁ•æ-^c^Áæ } á! ]|^ç^ }cæc!ç^Á { ^æ•~!^•

##### 2. Associated Institution Types

ÁF!ÎGÁÔçc^ }•ä [ ]  
ÁF!ÎGÁÜ^•^æ!&@

##### 3a. Outcome Type:

Ô@æ } \*^Á!á }ÁCE&cá [ ]ÁU~c& [ { ^ÁT^æ•~!^





GEFFAW)äç!•äc^Á[ÁX^! { [ ]cÁÖ [ { äi}^äáÜ^•^æ!&@æ}á!Öçc^•ä [ }ACE) } ~æ!áÜ^ [ !cÁ[-ÁCE&& [ { ]i•@ { ^}c•kæ}á!Ü^•~|c•

P [ { ^Á\*æ!á^}^!Á [ [ \Á- [ !Á ] ^, Áçæ!á^cá^•Ác@æcá, ä!|Á^} @æ} &^Ác@^á!Á\*æ!á^} •ÉÁ^cá^Á@æ!á^ÉÁV@^Á, æ}c } ^, Á\*æ!á^}Á!æ&cá&^•Ác@æcáæ!^Á!^••Á!^• [ ~!&^Áä]c^} •äç^Áæ}á!á^cá^!Á- [ !Ác@^Á^}ç! [ ] { ^}cÉÁCE [ ]! [ ]!æcc^ &@ [ ä&^Á[-Áçæ!á^cá^•Áæ}á! [ ]!^!Á&~|c~!^Á, ä!|Á!^•~|cÁä}Á { [ !^Á^•~cæä}æ!á^!æ}á!&æ}^•Á, äc@Á!^••Á}^•^á- [ ! ä} ] ~c•Á[-Á-^!cá!ä: ^!•Áæ}á! ]^•cá&á^•ÉÁ!^•~|cá} \*Á!^••Á^}ç! [ ] { ^}cæ!Áä [ ]æ&cáæ}á!^•!^æc^!Á^& [ ] { ä& •æçä} \*ÉÁÖ! [ , ^!Á!^cæ!^!•Á}^•^áç [ Á^Á^ ] äæc^á! [ ]Ác@^Á^, Á] |æ}cÁçæ!á^cá^•Áæ}á!•c!æc^•á^•Á- [ !Á ] ^•c æ}á! ^•á^ [ æ}æ^• { ^}cÁc [ Á { æä}cæä}Á [ !Áä] &!^æ•^Áä~•ä}^••Áç!æä!äc^É

**What has been done**

Uç^!ÁFG€€Á@ [ { ^ [ , ] ^!c•Á~^•cá [ ] •Áæ!^Á@æ}á!^á^•^æ!^•á^ÁTæc^!ÁÖæ!á^}^!ÉÁV [ ~!Ác [ Á@ä•c [ !ä& æ}á!áäç^!•ä-á^Á\*æ!á^}•Áä} &]~á^Á^á &æcá [ ]æ!Á! [ !\*!æ { •ÉÁV@^ÁCE) } ~æ!ÁX^! { [ ]cÁÖ [ , ^!Á•@ [ , Á@æä JÉ! €€Áæcc^] á^•ÉÁŠæc^Á^æ!Á! Í€Á~} ä~^Áä} ä!çä!æ!æcc^] á^•áFÉHÁ^á &æcá [ ]æ!Á^• { ä}æ!•ÉÁÖ! [ , ^! !^cæ!^!•Á { ^cÁ^á^} } äæ!^Áä} ÁæÁ { ~|cá•cæc^Á^~ [ !cÉÁ!Á•cæc^•Á, ^!^Á!^ ] !^•^}c^á^, äc@Á•æ!^•Ác [ cæ!ä} \*Á [ ç^! ÁGÉHÁä!ä] [ ]ÉÁV [ ] ä&^Áæ!^Á^, Á] |æ}cÁçæ!á^cá^•ÉÁÜTÉÁæ}á! •cæä}æ!á^æ}á!^}ç! [ ] { ^}cæ!^Á-!á^}á!^ \*æ!á^}Á•c!æc^•á^•ÉÁY^á^äc^•Áæ}á!Ác@^ÁCE&! [ ••Ác@^ÁÖ^] &^ÁVXA]! [ !\*!æ { Á& [ ]cá} ~^É

**Results**

Tæc^!ÁÖæ!á^}^!ÁçTÖDÁ@^! [ ]ä}^Á•~!ç^~Á!^•~|c•Áä} ä!æ&cáJ! ÍÁ@ [ { ^Á\*æ!á^}^!Á { æá^Áæ!&@æ} \*^Áä} \*æ!á^}ä} \*Á]!æ&cá&^•Áæ•Áæ!Á^•~|cÁ[-ÁTÖÁæäç!&^ÉÁV@^ÁX^! { [ ]cÁÖ [ , ^!Á•@ [ , Á•~!ç^~Á!^•~|c•Á-! [ { ]!^cá [ ~•Áæcc^] á^•ÉÁä} ä!æ&cá^Á Í€ÁÁçGEJDA&@æ} \*^á^•æ!á^}ä} \*Á]!æ&cá&^•Áæ}á! ÍÁÁ•cæc^á^c@^~ ]~!&@æ•á^}^•Á] |æ}cÁçæ!á^cá^•ÉÁÖ~•Ác [ ~!•Áæç!æ^•Á!HÁ!^!^æcáæcc^} á^•ÉÁV@^Á { [ •cÁ!^&^}cÁ~!ç^~ ä} ä!æ&cá^áæ!|á^~cÁGÁ@æ!Á&@æ} \*^á^•æ!á^}ä} \*Á]!æ&cá&^•Á [ !Á\*! [ , ]Á^, Áçæ!á^cá^•Áæ•^á^ [ ]Á, @æcá@^~ @æ!Á!æ!}^•á^æ}á!^}cÁæ}^•á^}^}cÁæ}^•á^ [-ÁÁ! ÍGÁ] ^!Á] ^! [ ]Á [ ]Á^, Á] |æ}c•ÉÁÖ [ { äi}^á^!^•~|c•Á•@ [ , ç^!ÁFG€€Á@ [ { ^Á\*æ!á^}^!Á&@æ} \*^á^!}!æ&cá&^•Á^•}^•cá} \*Ác@^Á^}ç! [ ] { ^}cÉÁV@^ÁP^, ÁÖ} \*!æ}á P~!•!^ÁCE•• [ &ÉÁ { ^cá} \*Áç^}á [ !•Á•~!ç^~^á^}ÁG€€!Áä} ä!æ&cá^Á Í€ÁÁ [-Ác@^Á]!^cá [ ~•|~Áæcc^] á^} \* ç^}á [ !•Á\*!^, Á] ^, Áçæ!á^cá^•Áæ•^á^ [ ]Á, @æcá@^~Á!^æ!}^•á^ÁG€€!Á]! [ b^&c^á^ç^}cÁ•æ!^•Ác [ cæ!á^ ÁJJH€€€€

**4. Associated Knowledge Areas**

**KA Code Knowledge Area**

Í€F Ò& [ ] [ { ä&•Á[-ÁCE\*!ä&~|c~!æ!áÜ! [ ä~&cá [ ]Áæ}á!ÁÖæ! { ÁTæ}æ^• { ^}c

Í€I



G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^••ä [ ACE) } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]!ä•@ { ^}c•hæ}ä!Ü^•~|c•

G€FF €

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                         |
|---------|--|
| GFÎ     | Q)c^*!æc^äÄÜ^•cÄTæ}æ*^ { ^}cÄÜ^•c^ { • |

#### Outcome #25

##### 1. Outcome Measures

P~ { ä^!Ä[-Ä]æ!cä&ä}æ)c•Ä, @ [Ä\* [Ä [ ]Äc [Ä•cæ!cÄæÄä~•ä}^••Ä, äc@ä}ÄFÄ { [ ]c@•Ä[-Ä& [ ~!•^Ä& [ { ]|^cä [ }

P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

#### Outcome #26

##### 1. Outcome Measures

P~ { ä^!Ä[-Ä]æ!cä&ä}æ)c•Ä, @ [Ä { æ\^Äæ}Ää}- [ ! { ^äÄä^&ä•ä [ ]Äc [Ä] [ cÄ•cæ!cÄæÄä~•ä}^••Äæ-c^!Ä& [ { ]|^cä} \*Äc@^ & [ ~!•^

P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

#### Outcome #27

##### 1. Outcome Measures

P~ { ä^!Ä[-Ä]æ! { ^!•Ä, @ [Ä, ä|Ä\*! [ , Äæ} äÄ { æ! \^cÄ [ ^ä^æ}•Ä- [ !Ä| [ &æ|Ä-^äÄÄ [ ä|Ä] : [ ä~&cä ] Ä [ !Ä^ç ] [ !c { æ! \^cÄc [ Ää} & !^æ•^Ä-æ! { Ää} & [ { ^

P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

#### Outcome #28

##### 1. Outcome Measures

P~ { ä^!Ä[-Ä]æ! { ^!•Ä, @ [Ä, ä|Ä\*! [ , Äæ} äÄ] : [ ä~&^Ä^}^! \*~Ä&! [ ]•Äæ} äÄc!æ}•- [ ! { Ää} c [ Ä^}^! \*~Ä] : [ ä~&c•

P [cÄÜ^] [ !cä} \*Ä [ ]Äc@ä•ÄU~c& [ { ^ÄT^æ•~!^

G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]c!Ö [ { ää}^äÜ^•^æ!&@Äæ} ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]|ä•@ { ^}c•Äæ} ä!Ü^•~|c•

**Outcome #29**

**1. Outcome Measures**

▷~ { ä^!Ä[-Ä]æ!cä&ä]æ}c•Ä]æ••ä} \*Äc@^Ä!^~ ä!^äÄæ] ]|ä&æc [ !•Ä|ä&^}•ä} \*Äc^•c

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ }

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ }ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | í€     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]clÖ [ { ää}^äÄÜ^•^æ!&@hæ)ä!Öçc^••ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]!i•@ { ^}c•hæ)ä!Ü^•~|c•

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ }ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | FGÌ    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area  |
|---------|---|
| Î€F     | Ò& [ ] [ { ä&•Ä[-ÄCE*!ä&~ c~!æ ÄÜ! [ ä~&cä [ }Äæ)ä!ÄØæ! { ÄTæ}æ*^ { ^}c |

**Outcome #31**

**1. Outcome Measures**

Ɔ~ { ä^!Ä[-Äæ] ]|^Ä\*! [ , ^!•Ää}c^!^•c^ÄäÄ}Äc@^Ä-^æ•äà|äc^Ä[-Ä [ !\*æ)ä&Ä] ! [ ä~&cä [ ]É

**2. Associated Institution Types**

ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄS [ , |^ä\*^ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | Î      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ü^&^}cÄ•@ä-c•Ää}Ä& [ ] •~ { ^!Ä]!^-^!^} &^Ä- [ !Ä}^ , ^!Ä&~|cäçæ!•ÉÄ\*! [ , ^!•Äæ!^Ä] |æ}cä} \*Äää--^!^}c|^É  
Ö! [ , ^!•Ä , æ}cÄc [ Ä\ } [ , Ä , @æÄc@^Ä] [ c^}cäæ|Ää•Ä- [ !Ä•~•cæä}æà|^Äæ}äÄ] ! [-äcæà|^Ä [ !\*æ)ä&Ä] ! [ ä~&cä [ ]É

G€FFÁW}äç^!•öc^Á[-ÁX^! { [ ]}cÁÔ [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^}•ä [ }ÁCE} } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]}|ä•@ { ^}c•Áæ}á!Ü^•~|c•

**What has been done**

V@^Á]! [b^&cÁ^çæ { ä}^•Ác@^Á [ ] [ !c~ }äcä^•Áæ}á!&@æ||^} \*^•Á [-Á [ !\*æ}ä&Á]! [ ä~&cä [ ] ÉÁÁÁÔ [ ] cä} ~^ä  
!^•^æ!&@Áä}Ác, [ Á&^!cä-ä^á! [ !\*æ}ä&Á [ !&@æ!ä•Áä}ÁX^! { [ ]}cÁæ}á! \* [ ~ }á!& [ ç^!Á { æ}æ\*^ { ^}cÁ!^•^æ!&@Áä}  
Tæä}^ÉÁ] |æ}cä} \*ÁæÁ} ^, Á [ !\*æ}ä&Á!^•^æ!&@Á [ !&@æ!ä!Ác [ Áæä!^••Áä^}cä-ä^á!&@æ||^} \*^•LÁ~!c@!  
á^ç^! [ [ { ^}cÁ [-Ác@^ÁU! \*æ}ä&CEÁ, ^W ^c c ~ ] ä^ Á [ !\*æ}ä ä ÷

---

G€FFÁW)äç^!•äc^Á[-ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@hæ}á!Ôçc^}•ä [ ]ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]|ä•@ { ^}c•hæ}á!Ü^•~|c•

### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| G€FF | F€     |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

CE•Á- [ [ ä!ä^& [ { ^•Á { [ !^Á•&æ!^Á , äc@Á [ [ ]~|æcá [ ] Áä}&!^æ•^ÉÁ& [ { { } äc^Áä•Á [ [ \ä } \*Á- [ !Á•~•cæä}æà|^æ\*!ä&~|c~!^É

#### What has been done

Ü^c~ ]Á•^ { äÉ•c!~&c~!^ä!ä}c^!çä^ , •Á [-ÁF íEG€Á•~•cæä}æà|^hæ\*!äÉ- [ [ ä!^}c!^!|^}^!•hæ}ÁX^! { [ ]cÉÁÁWcá|ä : ^}^c , [ !\Á [-Á} [ ]É]! [-äcÉÁWXTÁÔçc^}•ä [ ]hæ}á!Ücæc^Á\* [ ç^!} { ^}c!•cæ\^@ [ |ä!•Ác [ Áä!^}cä~^Á [ [ c^}cæ| ä}c^!çä^ , ^•ÉÁ]æ!cä&~|æ|^Ác@^ÁÔ [ { { } äc^ÁCEäçä• [ !^c^æ { É

#### Results

Þ [ Ácæ} \*ä!|^Á!^•~|c•Áæc!c@ä•Ácá { ^É

G€FFÁW}áç^!•öc^Á[-ÁX^!{ [ ]cáÔ [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^••ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]|ä•@ { ^}c•Áæ}á!Ü^•~|c•

Ü&ä^}cä-ä&Á!^•^æ!&@Á& [ { { ~ }äc^Á•c~ä^ä} \*Áäæ&c^!äæ|Á]æc@ [ \*^}^•ä•Áæ}ä!Á}c!æ&^|~|æ!Á•ä\*}æ|ä} \*  
]æc@, æ^•Á& [ ]c!ä~c^Ác [ Áä~^!^} &^•Áà^c, ^^}Á& [ , •Áä}Ác@^!Áä} }æc^Á!^•ä•cæ} &^Ác [ Á { æ•cäc•É

**What has been done**

Øä! [ à|æ•cÁ&~|c~!^•^A@æç^Áá^^}Á^•cæà|ä•@^Á!-! [ { ÁF íÁ&æ|ç^Á•Á•æ { ]|^áæcÁæ] ]!; çä { æc^|^Á íÁæ} äÁFFÉÁæ} ä  
F íÁ { [ ]c@•Á [-Áæ\*^É

**Results**

Ü^• [ ] { }•^•Á [-Ác@^Á-ä! [ à|æ•c•Ác [ ÁŠÜÜÁ!^ç^æ|Á•~ä•cæ}cäæ|Áà^c, ^^}Éæ} ä { æ|Áçæ!äæcä [ }Áä}ÁQŠÉ Ì  
]! [ ä~&cä [ ]ÉÁV@ä•Á { [ |^&|^Áä•Á\^~Ác [ Á!^&!~äcä} \*Áä { { ~ }^Á&^|}•Ác [ Ác@^Á•äc^Á [-Áä]-^&cä [ ]ÉÁV@^Á& [ , •  
^!^Á!æ} \^ä!-! [ { Á@ä\* @^•cÁc [ Á [ , ^•c!æ} äÁ, ^!^Á•~ä•^~^}c|^Á&@æ|^} \*^äÁ, äc@Áæ}Áä}c!æç^ [ ~•  
ä}~•ä [ ]Á [-ÁŠÜÜÉÁV@^Áä}Áçäç [ Á!^•~|c•Áæ!^Á& [ ]•ä•c^}cÁ, äc@Ác@^Áä}Áçäç! [ Á!^ä&cä [ ]•Áä}Ác@æcÁ•^!~ { Á|^ç^|•  
[-ÁQŠÉ íÁæ} äÁVØÉæ!-æÁ, ^!^Á@ä\* @^!Áä}Ác@^Á@ä\* @Á!^• [ ] ä^!Á&æ|ç^Á•ÉÁÜ^•~|c•Á, @ [ Ác@æcÁc@^Á• [ { æcä&  
ä { { ~ }^Á&^|}•Áä}Á { ä|Á!^ { æä}^ä!^|çæc^ä- [ !ÁæÁ [ ] \*^!Á] ^!ä [ äÁ [-Ácä { ^Áä}Ác@^Á@ä\* @Á!^• [ ] } ää} \*Á& [ , •É

GEEFFAW)äç^!•ic^Á[-ÁX^! { [ ]cáÖ [ { ää}^ááÜ^•^æ!&@kæ}ááÖçc^••á [ ÁCE} } ~æ|áÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•kæ}ááÜ^•~|c•

CE••ä•cÁ [ ! \*æ } ä&Áæä! ^Á-æ! { ^!•Áä } Áá^ç^ [ [ ]ä } \*Á ] !æ&cä&^•Áàæ•^áÁ [ ]Á-| ~ &c ~æcä } \*Á ]æ^Á ]!ä&^ÉÁ [ , Á& [ •c ]! [ á ~ &cä [ ]kæ } áÁ-~||Á ~cá|ä : æcä [ }Á [-Ác@^á!Á [ , }Á- [ !æ \* ^•É

**Results**

V@^Á ]! [ b^&cÁá^ç^ [ ] ^ááæ } Áá } } [ çæcäç^Á^á ~ &æcä [ ]æ|Á•c!æc^ \* ^Ác [ Áá } &!^æ•^Ác@^Á } ~ { à^!Á [- \} [ , |^á \*^æà|^Á•^!ç!&^Á ]! [ ç!á^!•ÉÁÖ ~ !á } \*Ác@^Á!^ [ !cä } \*Á ] ^!á [ áÉÁ^ } áÉ [-É•^••á [ ]Á^çæ| ~æcä [ ]•Á , ^!^ æá { á } ä•c^!^áÁc [ Ác@^Á , ^àá }æ!Á ]æ!cä&á ]æ }c•ÉÁÁV@^Á ]! [ b^&cÁ ]á [ c^ááæÁ!^\*á [ ]æ|Á!^æ! } ä } \*Á@ ~ àáæcÁc@^ X^! { [ ]cÁU! \*æ } ä&ÁÖæä! ^ÁU! [ á ~ &^!ÁÖ [ ]-^!^ } &^Á , @^!^ÁæA \* ~ ^•cÁ• ] ^æ \ ^ &^• ]!ä ~

G€FFÄW)äç!•äc^Ä[-ÄX^! { [ ]cÄÖ [ { äi}^äÄÜ^•^æ!&@Äæ}ä!Öçc^••ä [ÄCE} }~æ!ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•Äæ}ä!Ü^•~|c•

Öç] ^!ä { ^}c•Ä, ä||Äà^Ä& [ ]ä~&c^äÄä}Ä, @ä&@Ä { æ} |^Ä•^!~ ]Ää•Ä]! [ ä~&^äÄ•ä { ~|cæ} ^ [ ~•| ^Ä, äc@ ~} & [ ] & ^} c!æc^äÄç!æ, CDÄ { æ} |^Ä•æ] Äæ} äÄc@^Ä•æ { ^Ä•æ] Äc@æcÄ@æ•Äà^Ä} Ä& [ ] & ^} c!æc^äÄç!æc { ^} cÄÄ~ !^ç!^•Ä [ • { [ •ä•ÄçÜÜDEÄÜ^!~ ] Ä^ç] ^!ä { ^}c•Ä]! [ ä~&^äÄ•ä { ~|cæ} ^ [ ~•| ^Ä, äc@ÄæÄc@ä!äÄc!^æc { ^} cÄÄ~ ] [ !cä [ ] Ä [-Äc@^Ä•æ] Ä& [ ] & ^} c!æc^äÄä~ÄÜUÄc [ Ä! ÄÄä]~c^äÄ, äc@Ä, æc^!Ääæ&\Äc [ Ä!æ, Ä•æ] Ä•~\*æ! Ü^•^æ!æ!&@ÄÖ^}c^!Äæ}ä!Ää•Ä!^] ^æc^äÄ-äç^Äcä { ^•Ää~!ä} \*Äc@^ÄG€FFÄ { æ} |^Ä]! [ ä~&cä [ ] Ä•^æ• [ ] È

**Results**

V@^Ä!^•~|c•Ä-! [ { Äc@^Ä^ç] ^!ä { ^}c•Ä& [ ] ä~&c^äÄä} ää&æc^Äc@æcÄ { æ} |^Ä•^!~ ] Ä]! [ ä~&^äÄ, äc@ ~} & [ ] & ^} c!æc^äÄ•æ] Ä, æ•Ä•ä\* } ä-ä&æ} c!^Ääæ!^!Ää} Ä& [ [ !Äc@æ} Ä•^!~ ] Ä]! [ ä~&^äÄ-! [ { Äc@^Ä•æ { ^Ä•æ] & [ ] & ^} c!æc^äÄç!æc [ Ä! ÄÄä~ÄÜUE

**4. Associated Knowledge Areas**

**KA Code      Knowledge Area**

Î€F              Ö& [ ] [ { ä&•Ä[-ÄCE\*!ä&~|c~!æ!ÄÜ! [ ä~&cä [ ] Äæ} äÄÖæ! { ÄTæ}æ\*^ { ^}c

**Outcome #37**

**1. Outcome Measures**

Ö^} ^-äc•Ä [-Ä [ ] Ä-æ! { Ä^& [ •^•c^ { Ä^!çä&^Ä& [ ] •^!çæcä [ ] Äæ} äÄæ•••• { ^}cÄ [-Ä, æc^!Ä~æ|äc^ÄÖTÜÜÄæ} ä ä} [ çæcäç^Ä] !æ&cä&^Ä [ ] Ä• { æ||Äæ} äÄ { ^ä~ { Ä•ä: ^•Ä-æ! { •È

P [ cÄÜ^ [ !cä] \*Ä [ ] Äc@ä•ÄÜ~c& [ { ^ÄT^æ•~!^

**Outcome #38**

**1. Outcome Measures**

Üc!æc^ä^Äc [ Ä!ä { äcÄ!^ä~&cä [ ] •Ää} Ä { æ} |^Ä•æ] Ä^ä^Ää} Äçæ&~ { Ää} •cæ||æcä [ ] •È

**2. Associated Institution Types**

ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää} ÄS [ ], |^ä\*^ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | FÍ     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**



G€FFÄW)äç!•äc^Ä[ÄX^! { [ ]cÖ [ { ää}^äÄÜ^•^æ!&@Äæ}ä!Öçc^•ä [ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c^Äæ}ä!Ü^•^c^

Tæ |Ä^•æ]Ä^ä^!ä^•Äc^ ]ä&æ||^Ä^Ä&|ä}^Ä^Äæ&@Ä^æ!Äæ-c^!ÄæÄ { ää} |ä}^Ä^Äæ} äÄc^ ää} \*Ä^•c^ { Ää^Ää} •cæ||^äÉÄV@^ Äæ^••Ä^Ä^ [ !Äc@ä^Ä^Ä&|ä}^Ä^Ä^!Ä^ } &|Äæ!ÉÄ@ [ , ^ç^!Äc@^Ä^ä~^!^ } &^Ä^Ä^c^ ^Ä} Ä^ä^!ä^Ää} Äc@^Ä^ä! •cÄ^•Äæ^ [ ] Äæ} ä^ä^!ä^Äæ-c^!Ä^ÉÉÄ^Äæ! •Ä[-Ä^ ]^!Äæcä [ ] Ä&æ} Äæ { [ ~ } cÄc [ Ä^ÉÄÄ [ !Ä { [ !^ÉÄV@ä^Ä ] ! [ !^Ä&cÄ^••^ \ •Äc [ Ä^ä^çä^•^ •c!Äæ^•ä^Ä^ , @^!^Ä^Ä^Ä^ { æ} |Ä^ ] ! [ ä^~&^!^Ä&æ} Ä { ää} cæä} Ä@ä^•@Ä^•c^ { Ä^ä^!ä^Ä^Ä [ ç^!ÄæÄ [ ] \*^!Ä^ ]^!ä [ äÄ [-Äcä { ^Éæ} äÄc [ Ä^Ä^c^! { ä}^Äc@^Ä^Ä& [ ] [ { ä&Ä|ä~^cä { ^Ä [-ÄæÄ { ää} |ä}^Äc^ ää} \*Ä^•c^ { É

**What has been done**

V@^Ä^•ä^Ä^ ]cä^•c^Ä& [ { ]æ!^Ä^Äæ} } ~æ|Ä^•æ]Ä^ä^!ä^Äc^~ } æ} cÄc^Äæ} äÄ^~æ|äc^DÄ-! [ { ÄæÄ^•c^ { Ää} •cæ||^äÄä} Ä-æ|| G€€ÉÉÄ , äc@Ää~^!^ } cÄ { æ} ä^•^ { ^} cÄ^c!Äæc^•ä^Äc [ Ä^Ä^c^! { ä}^Ä^ , @ä&@Ä^•@ [ , •Äc@^Ä|æ!^•^cÄ^~^Ä&cÄ [ ] { ää} cæä} ä} \*Ä@ä^•@Ä^ä^!äÉÄV@^!^Äæ!^Äc^ , [ ÄÄ& [ ] c! [ |Ä^Ää^~ä|cÄä } c [ Äc@^Ä^ç ]^!ä { ^} cæ|Ä^ä^•ä^ } ÉÄÜ^ ]^Ää^ÄæÄ^ ]^ , •^•c^ { Ää} •cæ||^Ä^Ää} ÄG€€ÉÄæ} äÄ^ä { ]|^Ä { ää} cæä}^Ä^ÉÄY^æ!|^Ä^!^çä^ , Ää} ää&æc^•ÄæÄ ] ! [ \*!^••äç^Ä^Ä&|^æ^•Ä çæ-c^!Ä^•cæ} äæ!ää: äcä [ ] Ä- [ !Äæ} } ~æ|Ää~^!^ } &^•DÄ-! [ { Äc@ä^•Ä [ , Ä& [ ] c! [ |Ä^•c^ { ÉÄ , @ä&@Ä , ä|Ä!^ ] !^••^ } cÄc@^Ä c^ ] ä&æ|Ä { æ} |Ä^Ää} •cæ||æcä [ ] É

**Results**

V^~ää} \*Ä^•c^ { •Ä^•@ [ , Ä^!ä~æ!Äæ} äÄ& [ ] cä} ~ä} \*Ä!^ä^~&cä [ ] •Ää} Ä^•æ]Ä^ä^!ä^Äæ^Äc@^Ä^Äæ^•ÄÉÄÖ^Äc@^Äcä { ^ c@^Ä^Äæ!^Ä^ç^Ä^Äæ!^•Ä [ |äÉÄc@^Ä^Äæç^ÄÄ [ •cÄ^ ] Äc [ Ä [ ]^Äc@ä!äÄ [-Äc@^Ä!Äc [ cæ|Ä^•æ]Ä^ä^!äÄ ] [ c^ ] cäæ|ÉÄVW^•ä } \*æ} } ~æ||^É!^ ]|æ&^æä|^Ä^• [ ~ cÄæäæ] c^!^Ä [ !Ä!^ ]|æ&ä} \*Ää [ ] •Äç^• [ ~ c^ÉÄä! [ ] |ä}^Äæ} äÄc^•DÄ&æ} Ä]æ!cäæ||^É ä^cÄ [ cÄ& [ { ]|^c^!^Ä [ ~•^Äc@^Ä^ÄÄ [ ••••É

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area  |
|---------|---|
| FGH     | Tæ}æ^ { ^} cÄæ} äÄÜ^•cæä} ää äc^Ä [-ÄØ [ !^•cÄÜ^• [ ~!&^• |

**Outcome #39**

**1. Outcome Measures**

Ö^c^Ä&cÄæ} äÄ^çæ|~æc^Ä^\*^ } ^cä&Ää~^!^ } &^•Ä^Äc^ , ^^ ]Äæ} ä { æ|Ää} Ä^•^ }^•Ää} ç [ |ç^ÄäÄä} Ä!^• ] [ ] •^Äc [ ä}^Ä&cä [ ] É

**2. Associated Institution Types**

ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää} ÄS [ , |Ä^•^ÄÜ^~c& [ { ^ÄT^Äæ^~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | Í      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ü^!Ä { æ!|^Äcæ!^•cÄæ^~ä^ } &^Ä^•Äc@^Ä^•&ä^ } cä~ä&Ä!^•^Äæ!&@Ä& [ { { ~ } äc^Ä^•c^~ä^ä} \*Ää&æc^!äæ|Ä]æc@ [ \*^ ]^•ä^•É

GEFFAW}äç^!•öc^Á[ÁX^! { [ ]c!Ö [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^••ä [ }ACE} }~æ!áÜ^ [ !c![-ÁCE&& [ { ]!•@ { ^}c•hæ}á!Ü^•~|c•

**What has been done**

Öç [ ^!ä { ^}c•Áæ!^Áà^ä} \*Á& [ ] ä~&c^áÁc [ Á^çæ|~æc^Á\*^ } ^ç&Áä~^!^ } &^•áà^c, ^ } Áäæä!^Áæ } ä { æ|•Áä } Ác@^!ä!  
ä } }æc^Á!^•• [ ] •^Ác [ Áä ] ~^&cä [ ] ÉÁQ}Á^ç [ ^!ä { ^}c! [ ] ^ÉÁæ!á! { æ!á-ä! [ à|æ•c! { [ á^!Áä•Áà^ä } \*^•^áÁc [ ^!  
ä } ç^•cä\*æc^Á\*^ } ^ç&Áä~^!^ } &^•Áä } Á!^•• [ ] •^•Áà^c, ^ } Á& [ , •Á, äc@Á [ !Á, äc@ [ ~c!&@! [ ] ä&Á { æ•cäcä•ÉÁV@^•^  
æ } ä { æ|•Áæ!^Áà^ä } \*Á•^!^&c^áÁ-! [ { Áæ! [ &æ!Á& [ { { ^!&äæ!Á@^!á! } Ác@^Áäæ•ä•Á [-Á { [ ]c|~Á { ä|Á• [ { æcä&Á&^!|  
& [ ~ }c•Áæ } á!Áàæ&c^!ä [ ] \*ä&æ!Á^çæ|~æcä [ ] ÉÁV@^•^Áæ } ä { æ|•Á, ^!^Á•^!^&c^áÁàæ•^á! [ ] Á@ä\* @Á [ !Á [ ,  
\*^ } [ { ä&Á^•cä { æcä [ ] Á [-Ác@^!Á! ] ! [ ä~&c!ç^Á|ä-É

**Results**

Ú!^!ä { ä }æ!^Á!^•~|c•Á-! [ { Á- [ ~!Áæ } ä { æ|•Á } ^!Á\*! [ ~ ] Á@æç^Á [ c!^ç^æ!^á!á^c, ^ } É& [ , Áä~^!^ } &^•Áä } Ác@^  
æ!ä!äc^Á [-Ác@^!Á-ä! [ à|æ•c•Ác [ Á!^•• [ ] } äÁc [ Á& [ { [ ] } ^ }c•Á [-Áäæ&c^!äæ!Á&^!|Á, æ!|ÁçSÚUÁÖ!æ { É } [ •äc!ç^É  
Úæ { GÖUS!LÁÖ!æ { É } [ •äc!ç^ÉÁQ}Á^ç [ ^!ä { ^}c!c, [ ÉÁ•\ä } Á•æ { ]|^•Á, ^!^Á [ äcæä } ^á!-! [ { Áæ! [ &æ!Á-æ! { É  
V@^Á\*^ } [ { ä&Á^•cä { æc^•Á, ^!^Áäæ•^á! [ ] Áæ! [ €SÁÜPÚÁ&@!Áæ } á!^!-! [ { ^á!Áä } Á& [ ] b~ } &cä [ ] Á, äc@ÁWUÖÇÉÉ  
ÇÜÜÉÁÚ!^!ä { ä }æ!^Á!^•~|c•Á-! [ { Á•äçÁæ } ä { æ|•Á } ^!Á\*! [ ~ ] Á@æç^Á [ c!^ç^æ!^á!á^c, ^ } É& [ , Áä~^!^ } &^•  
ä } Ác@^Áäæ!ä!äc^Á [-Ác@^!Á-ä! [ à|æ•c•Ác [ Á!^•• [ ] } äÁc [ Á& [ { [ ] } ^ }c•Á [-Áäæ&c^!äæ!Á&^!|Á, æ!|ÁçSÚUÁ!  
Úæ { GÖUS!DÉ

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area     |
|---------|--------------------|
| HFF     | CE}ä { æ!ÁÖä•^æ•^• |

**Outcome #40**

**1. Outcome Measures**

Q { ]! [ ç^Á& [ ] [ { ä&Áæ } ä!^ } ç!ä! [ ] { ^}c!á } Á•~•cæä }æ!ä!äc^Áä } Ác!^Á!-!~äc! }! [ ä~&c! [ ] Ác@! [ ~ \* @Á&@æ } \*^•Áä } Á! [ [ c  
•c [ &\Á~•^É  
P [ c!Ü^ ] [ !c! } \*Á [ ] Ác@ä•ÁU~c& [ { ^!T^æ•~!^

**Outcome #41**

**1. Outcome Measures**

Öçæ|~æcä } \*ÁXVÁÖ!æ••ÉÖæ•^á!Š!ç^•c [ &\Á-æ! { •Áæ } ä!æ\*!ä&~|c~!æ!Á [ ] |ä&^Áä { ] |ä&æcä [ ] •É

**2. Associated Institution Types**

ÁF! ÎGÁÜ^•^æ!&@

**3a. Outcome Type:**

Ô@æ } \*^!ä } ÁS } [ , |^á\*^ÁU~c& [ { ^!T^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
|------|--------|

GEFFAW)äç^!•öc^Á[-ÁX^! { [ ]cÖ [ { ää}^äáÜ^•^æ!&@kæ}ä!Öçc^•ä [ }ACE} }~æ|ÄÜ^ [ !cÄ[-ÁCE&& [ { ]i•@ { ^}c•kæ}ä!Ü^•~|c•

GEFF FÍ

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

CEcAc@^Á!^~^•cÁ[-Ác@^ÁXVÁP [ ~^•ÁCE\*!ä&~|c~!^ÁÖ [ { { äcc^ÉÁXVÁWÜÖCEËPÜÖÜÁÇPÜÖÜDÉÁæ } äÁc@^ÁXV  
CE\*^}&^Á[-ÁCE\*!ä&~|c~!^ÉÁÖ [ [ äÁæ } äÁ Tæ! \^c•ÁÇXCEØ T DÉAc@^ÁÜQÁ , ä|Ab [ ä } Á , äc@Ác@^ÁVX T ÁÖ^ } c^!Á- [ !  
Ü~•cæä}æà|ÁCE\*!ä&~|c~!^ÁÇÖÜCEDAc [ Á~cä|ä: ^Á@ä•c [ !ä&æ|Áæ } äÁ& [ ] c^ { [ !æ!~^ÁäæcæAc [ Á^çæ { ä } ^Áæ } äÁ^çæ|~æc^  
c@^Á• [ &ä [ É^& [ ] [ { ä&Áæ } äÁ^ } çä! [ ] { ^ } çæ|Ää { ] æ&c•Á [-Á\*!æ••Éàæ•^äÁ|äç^•c [ & \Á-æ! { ä } \*Áä } ÁX^! { [ ] cÉ

#### What has been done

Qä^ } cä~^Ác@^Á { æ&! [ É^ } çä! [ ] { ^ } çæ|Ää [ ] æ&c•Á [-ÁX^! { [ ] cÁæ } äÁPÜÖÜÁ ] ! [ \*!æ { •Áä } ÁX^! { [ ] cÉ  
Ü~æ|äcæcäç^Áä } c^!çä^ , •Á , ä|Ä^Á& [ ] ä~&c^äÁ , äc@Ác^&@ } ä&æ|Á^ç } ^!c•Á , @ [ Á , ä|Ä^Áæ•\^äÁc [ Áä^Á^ } cä~  
• ] ^&ä-ä&Áä { ] ! [ ç^ { ^ } c•Ác [ Á , æc^!Á~æ|äc~ÉÁ!^æ• [ ] •ÉÁ•&ä^ } cä-ä&Á { ^æ•~!^ { ^ } c•ÉÁæ } äÁ ] ! [ \*!æ { Áæcc!ä~c^ä  
c [ Ác@^Á^ } çä! [ ] { ^ } çæ|Ää { ] ! [ ç^ { ^ } c•ÉÁQ } - [ ! [ æcä [ ] Á , ä|Ä^Á^\*!^æ } ^äÁ [ ] Ác@^Á^ } ^!&^äç^Á^ } çä! [ ] { ^ } çæ|  
ä^ } ^äc•ÉÁ•~\*^•c^äÁ } ^æ•~!^ { ^ } c^ [ ^c@ [ ä•ÉÁæ } äÁ-æ! { Á!^|æc^äÁ^ } ^äc•Á-! [ { Á\*!æ••Á-æ! { ä } \*Áæ } ä  
[ c@^Á^ } çä! [ ] { ^ } çæ|Ää } ä!^Á-æ! { ä } \*Á { ^c@ [ ä•ÉÁQä^ } cä~^Ác@^Ác!^ } äÁä } Á\*!æ••Éàæ•^äÁ-æ! { ä } \*Áä }  
X^! { [ ] cÄ [ ç^!Ác@^Á^ } æ•cÄ F Í Á^~æ!•É

#### Results

Ú! [ ] ^!|^É { æ } æ\*^äÁ\*!æ••Éàæ•^äÁ|äç^•c [ & \Á-æ! { •Á@æç^Áä^ } Á•@ [ , ] Ác [ Á@æç^Áä^ } ^-ä&æ|  
^ } çä! [ ] { ^ } çæ|Ää [ ] æ&c•Ác@! [ ~\*^@Á&æ!ä [ ] Á•^~^•c!æcä [ ] ÉÁ• [ ä!Á!^c^ } cä [ ] ÉÁä { ] ! [ ç^äÁ , æc^!Á~æ|äc~ÉÁæ } ä  
!^ä~&^ä^~•^Á [-Áæ } ä } æ|Ä@ [ ] [ ] ^•Á [ !Áæ } cää [ cä&•ÉÁæ•Á& [ { ] æ!^äÁc [ Á& [ ] -ä } ^ { ^ } cÁæ } ä } æ|Äæ\*!ä&~|c~!^É

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area  |
|---------|---|
| Í€F     | Ò& [ ] [ { ä&•Á [-ÁCE*!ä&~ c~!æ ÄÜ! [ ä~&cä [ ] Áæ } äÁÖæ! { Á Tæ } æ*^ { ^ } c |
| Í€Í     | Pæc~!æ ÄÜ^• [ ~!&^Áæ } äÁÖ } çä! [ ] { ^ } çæ ÄÖ& [ ] [ { ä&•                   |

### Outcome #42

#### 1. Outcome Measures

Øæ! { Ác [ Áä } •cäc~cä [ ] •LÁ [ ] [ !c~ } äcä^•Á- [ !ÁX^! { [ ] cÄç^•^cæà|Á-æ! { ^!•É

#### 2. Associated Institution Types

ÁF! ÍGÄÜ^•^æ!&@

#### 3a. Outcome Type:

Ô@æ } ^•Áä } ÁS } [ , |^ä\*^ÁU~c& [ { ^! T^æ•~!^

#### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| GEFF | FG     |

GEFFAW}äç^!•ic^Á[-ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@Áæ}á!Ôçc^}•ä [ }ÁCE} } ~æ|ÁÜ^ [ !:cÁ[-ÁCE&& { [ ]!•@ { ^}c•Áæ}á!Ü^•~|c•

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Øæ! { ^!•ÉÁää•c!ää~c [ !:•ÉÁ]! [ &^•• [ !:•Áæ}á!ää}•cäc~cä [ }æ|Áà~^!•Á^} \*æ\*^á!ää}Á [ &æ|Á]! [ ä~&^Á]! [ &~!^ { ^}c  
^~ [ !:c•É

#### What has been done

Ù] ^&ä-ä&æ|| ^ÉÁ, ^Á, ä||Áä}c^!çä^, Áæ}Áæ! :æ^Á [-Á•~ ] | ^Á&@æä}Áæ&c [ !:•ÉÁV@ä•Á]! [ b^&cÁ, ä||Á~cä|ä: ^Á\^ ^Áä}- [ !: { æ}c  
ä}c^!çä^, •Áæ}á!Á! [ ~ } äcæà| ^Áää• •ä [ ]•Ác [ Áä Ú [ &~!^ { ^}c



G€FFÄW)äç^!•öc^Ä[ÄX^! { [ ]clÖ [ { ää}^äÄÜ^•^æ!&@Äæ}ä!Öçc^••ä [ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•Äæ}ä!Ü^•~|c•

ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄS} [ , |^ä\*^ÄU~c& [ { ^ÄT^æ•~|Ä

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | F€€    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ø [ !^•cÄÜ^•cÄÜ ] ^&æ|ä•c•ÉÄØ [ !^•cÄÜ^•cÄTæ}æ\*^ { ^ } cÄÜ [ |ä&^ÄTæ\^!•Ä , @ [ Äæ!^Ää } c^!^•c^Ää } Ä ] ^•c { æ } æ\*^ { ^ } cÉ

**What has been done**

Üæ { ]|^•Ä-! [ { Äc@^Ä { æ|æä•^Äc!æ } •Ä-! [ { ÄG€€!Äæ } äÄG€€!Ä@æç^Ää^ } Ä• [ !c^äÄc [ Ää^c^! { ä } ^Äc@^Ä } ~ { ä^! æ } äÄ• ] ^&ä^•Ä [-ÄÖ!æ { ä^ &äæ^Äæ } äÄ } æ!æ•äc [ ää•ÉÄV [ Ääæc^ÉÄ [ ç^!Ä!É€Ö [ |^ ] ] c^!æÄæ } äÄ | É€ P^ { ^ } [ ] c^!æÄ@æç^Ää^ } Ä& [ |^&c^äÄæ } äÄä^ } cä-ä^Äc [ Ä-æ { ä|^ÉÄU-Äc@^•^ÉÄ | Ä , ^!^Ä , [ [ äÉä [ !^!•Ä-! [ { c@^Ä-æ { ä|^•ÄÖ!æ { ä^ &äæ^Äç^! | DÄæ } äÄÖ~ ] !^•cäæ^ÄçF€ÉÄV@ä•Ä!^•^æ!&@Ää•Ä&!äcä&æ|Äc [ Ä-~c^!^Ä•c~ ää^•Ä [ ] ] \* @ [ ! ] ^äÄä^c|^•ÉÄÖ^&æ~•^Äc@^•^Ä ] ^•c•Ä• ] ^ } äÄ { ~ &Ä [-Äc@^!Äcä { ^Ä , äc@ä } Ä | [ \*•ÉÄæ } äÄ [ &&~!Ää } Ä-æä! | • { æ|Ä } ~ { ä^!•Ä& [ { ] æ!^äÄc [ Ä [ c@^!Ää } •^&cÄ• ] ^&ä^•ÉÄ•c~ ä^ä } \*Äc@^ { Ää•Ä } æ!cä&~|æ!|^Ä&@æ|^ } \*ä } \*ÉÄQcÄä• &!äcä&æ|Äc@æcÄ^~•^&cç^Ä { ^c@ [ ä•Ä [-Ä•~!ç^Äæ } äÄä^c^&cä [ ] Äæ!^Ää^çä•^äÉÄQcÄä•Äæ|• [ Ää { ] [ !cæ } cÄc [ Ää^\*ä } Äc [ ^•cæä|ä•@Ääæ^|ä } ^Ää } - [ ! { æcä [ ] Ä [ ] Äc@^Äää [ ääç^!•äc^Ä [-Äc@ä•Ä ] [ c^ } cäæ|^Ääæ { æ\*ä } \*Ä\*! [ ~ ] Ä [-Ä , [ [ äÉ ä [ !ä } \*Ää^c|^•Äæ } äÄc@^!Äæ•• [ &äæc^ÄÄ } æ!æ•äc [ ää•

**Results**

QcÄ , æ•Ä@^ [ c@^•ä : ^äÄc@æcÄ [ ] \* @ [ ! ] ^äÄä^c|^•Ä&æ } Ää^c^&cÄç [ |æcä|^Ä-! [ { Ä , [ ~ } äÄäÄ { æ } |Ä | [ \*•ÉÄV@^ ç [ | ~ { ^Ä [-Ä | [ \*•Ä { æ^Ää~^!^ } cäæ|^Äæcc!æ&cÄä^c|^•Äæ } äÄc@^!Ä } æ!æ•äc^•

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area   |
|---------|--|
| GFF     | Q}•^&c•ÉÄ T äc^•ÉÄæ } äÄUc@^!ÄCE!c@! [ ] [ ä•ÄCE~^&cä } *ÄÜ æ } c• |

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} } ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•hæ}ä!Ü^•~|c•

GEFFAW}äç^!•ic^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÄÜ^•^æ!&@kæ}ä!Öçc^}•ä [ }ÄCE} } ~æ|ÄÜ^ [ [ !cÄ [-ÄCE&& [ { ]}|ä•@ { ^}c•kæ}ä!Ü^•~|c•

result of information gained at the 2010 annual meeting, including 15 farmers that put up a new high tunnel and/or got a grant from NRCS to assist with their high tunnel construction. Well-managed leafy greens, tomatoes and other crops in high tunnels have been shown to net \$1 to \$3 per square foot annually, or more. (See: the Cornell High Tunnel site, <http://www.hort.cornell.edu/hightunnel/>, and the Northeast High Tunnel Manual, <http://www.uvm.edu/sustainableagriculture/hightunnels.html>.) So assuming an average annual net return of \$2 per square foot and a typical tunnel size of 24' x 100', the annual net per farm would be \$4,800 with an annual net of \$72,000 for the 15 farms with new tunnels. Over a twenty year period these tunnels will provide \$1.4 million in additional profit to these commercial farms.

Two workshops were held on **food safety and risk management for agritourism and culinary tourism**.

An evaluation immediately following the workshops indicated that 100% of survey respondents increased their knowledge of food safety risks and 92% reported that the workshop helped them understand how a food safety plan can be used to manage risk on their farm. Regarding intentions for the coming year, 91% of respondents reported that they were planning to implement changes based on information provided at the workshop and 38% indicated that they intended to create a new plan or change an existing plan to accommodate the changes being implemented. Food safety

---

---







G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@hæ)ä!Öçc^}•ä [ }ÄCE) } ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•hæ)ä!Ü^•~|c•

**Research**

GEFFAW}äç^!•ic^Ä[-ÄX^! { [ ]}clÖ [ { ää}^äÜ^•^æ!&@Äæ}ä!Öçc^••ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ}ä!Ü^•~|c•

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2011   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Actual | €         | F        | G     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Ü^•^æ!&@ÄÜ! [b^&c•

**Year**

**Actual**

GEFF

FH

**Output #2**

**Output Measure**

Y [ !\•@[ ]ÄÄÄ•ä } \*|^Ä•^••ä [ }

**Year**

**Actual**

GEFF

ï

GEFFAW}äç^!•öc^Á[-ÁX^! { [ ]clÖ [ { ää}^äÜ^•^æ!&@hæ}ä!Öcc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•hæ}ä!Ü^•~|c•

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME  |
|--------|---|
| F      | <p> <math>P \sim \{ \hat{a}^{\wedge} \hat{A} [ - \hat{A} - \hat{\alpha} ! \{ \wedge ! \bullet \hat{A} , @ [ \hat{A} \hat{a} \{ \} ]   \wedge \{ \wedge \} c \hat{h} \hat{a} \hat{A} \} \wedge , \hat{A} ] ! \hat{\alpha} \&amp; c \hat{a} \&amp; \wedge \hat{A} c [ \hat{A} \hat{a} \wedge * \hat{a} \} \hat{A} ] ! [ \hat{a} \sim \&amp; c \hat{a} [ \} \hat{A} [ ! \hat{A} c [ \hat{A} \hat{a} \{ \} ] ! [ \hat{c} \wedge \hat{A} \&amp; \sim ! ! \wedge \} c [ \hat{a} ] \bullet \wedge \wedge \hat{a} \hat{A} ] ! [ \hat{a} \sim \&amp; c \hat{a} [ \} \hat{A} \sim \hat{a} \wedge   \hat{a} \hat{h} \hat{a} \} \hat{a} \hat{A} \sim \sim \hat{\alpha}   \hat{c} \wedge</math> </p> |
| G      | <p> <math>\hat{O} \&amp; [ \} [ \{ \hat{a} \&amp; \hat{A} - \wedge \hat{\alpha} \bullet \hat{a} \hat{a}   \hat{c} \wedge \hat{h} \hat{a} \} \hat{a} \hat{A} \{ \hat{\alpha} ! \wedge \hat{c} \hat{A} ] [ c \wedge \} c \hat{a} \hat{\alpha} \bullet \hat{A} - [ ! \hat{A} [ \hat{a} ] \bullet \wedge \wedge \hat{a} \hat{h} \hat{a} \} \hat{a} \hat{A} - \hat{\alpha} ! \{ \hat{E} \bullet \&amp; \hat{\alpha}   \wedge \hat{A} \hat{a} \hat{a} [ \hat{a} \hat{a} \wedge \wedge   \hat{A} ] ! [ \hat{a} \sim \&amp; c \hat{a} [ \} \hat{A} \hat{a} \} X \wedge ! \{ [ \} c</math> </p>  |



G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ} äÄÖçc^••ä [ }ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]|ä•@ { ^}c•Äæ} äÄÜ^•~|c•

**KA Code Knowledge Area**

Î€F Ö& [ ] [ { ä&•Ä[-ÄCE\*!ä&~|c~!æ|ÄÜ! [ ä~&cä [ }Äæ} äÄØæ! { ÄTæ}æ\*^ { ^}c

**Outcome #2**

**1. Outcome Measures**

Ö& [ ] [ { ä&Ä-^æ•äàä|äc^Äæ} äÄ { æ! \^cÄ [ c^}cäæ|•Ä- [ iÄ [ ä|•^^äÄæ} äÄ-æ! { È•&æ|ÄÄä [ ää^•^|Ä]! [ ä~&cä [ }Ää} X^! { [ ]}c

**2. Associated Institution Types**

ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄS} [ , |^ä\*^ÄU~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | H      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ü^&^}c|^Äc@^!^Ä@æ•Ää^^}ÄæÄ!æ] ää|^Ä\*! [ , ä } \*Ää}c^!^•cÄä}Äää [ ~^|•Ää}ÄX^! [ { ]cÄæ} äÄæ&! [ ••Äc@^ÄW} äc^ä Ücæc^•ÉÄÄV@^Ä] [ c^}cäæ|•Ä[-Ää [ ää^•^|Ä- [ iÄ]! [ çää } \*Ä!^}^, æä|^Ä^}^! \*^Äæ} äÄä { ]! [ çä } \*Ä-æ! { Ä]! [-äcæàä|äc^

## V(H). Planned Program (External Factors)

### External factors which affected outcomes

Economy

Government Regulations

### Brief Explanation

## V(I). Planned Program (Evaluation Studies)

### Evaluation Results

Survey done at annual oilseed producers meeting asking repeat attendees how past conference attendance has helped. 80% reported improved economics; 60% improved weed control; 80% improved soil health; and 40% improved yields and quality.

In 2011, 15 agronomic trials were conducted in 5 counties. An oilseed crop enterprise analysis tool was developed and used by 6 farmers to determine profitability. Three outreach meetings were held in 3 counties to deliver oilseed production information to 300 stakeholders.

Since the start of the project in 2004 the number of farms producing oilseeds has increased from 0 to 26. The infrastructure required has also increased and now farms have the capacity to produce 2.6 million gallons of biodiesel per year. Based on costs of production and market pricing, all end products are profitable at current market prices. Both 5-year and 10-year payback periods are achievable with pricing below market pricing. Based on data collected from 6 oilseed farms, the cost of producing biodiesel averages \$1.35 gallon with the market price of diesel at \$3.64 gallon this is a potential profit of \$2.29 gallon.

### Key Items of Evaluation

In 2011, 15 agronomic trials were conducted in 5 counties. An oilseed crop enterprise analysis tool was developed and used by 6 farmers to determine profitability. Three outreach meetings were held in 3 counties to deliver oilseed production information to 300 stakeholders.

Since the start of the project in 2004 the number of farms producing oilseeds has increased from 0 to 26. The infrastructure required has also increased and now farms have the capacity to produce 2.6 million gallons of biodiesel per year. Based on costs of production and market pricing, all end products are profitable at current market prices. Both 5-year and 10-year payback periods are achievable with pricing below market pricing. Based on data collected from 6 oilseed farms, the cost of producing biodiesel averages \$1.35 gallon with the market price of diesel at \$3.64 gallon this is a potential profit of \$2.29 gallon.



G€FFAW}áç^!•óç^Á[-ÁX^! { [ ]}clÖ [ { áä}^ááÜ^•^æ!&@áæ}ááÖçç^••á [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]}!•@ { ^}c•áæ}ááÜ^•~|c•

**V(A). Planned Program (Summary)**

**Program # 6**

**1. Name of the Planned Program**

W!àæ}ÁP [ }ÁÚ [ á}cÁÚ [ ~!&^ÁÚ [ ||~cá [ }

**V(B). Program Knowledge Area(s)**

FÉÁÚ! [ \*!æ { ÁS} [ , |^á \*^ÁCE!^æ•áæ}ááÜ^!&^}cæ \*^

| KA Code | Knowledge Area   | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|--|-----------------|-----------------|----------------|----------------|
| FFG     | Y æc^!•@^ááÚ! [ c^&cá [ }Áæ}ááTæ}æ *^ { ^}c                    | F€€Ä            |                 | €Ä             |                |
| FGF     | Tæ}æ *^ { ^}cÁ [-ÁÜæ} *^ÁÜ^• [ ~!&^•                           | €Ä              |                 | GÄ             |                |
| FGH     | Tæ}æ *^ { ^}cÁæ}ááÜ~•cæá}æáá áç^Á [-ÁØ [ !^•c Ü^• [ ~!&^•      | €Ä              |                 | FíÄ            |                |
| FGI     | W!àæ}ÁØ [ !^•c!^   | €Ä              |                 | FíÄ            |                |
| FGÍ     | CE *! [- [ !^•c!^  | €Ä              |                 | G€Ä            |                |
| FHF     | CE c^!}æcáç^ÁW•^•Á [-ÁŠæ}á                                     | €Ä              |                 | HÄ             |                |
| GFF     | Q}•^&c•EA T áç^•EAæ}ááUc@^!ÁCE!c@! [ ] [ á• CE--^&cá} *^ÁÚæ}c• | €Ä              |                 | FíÄ            |                |
| GFÍ     | Q}c^ *!æc^ááÜ^•cÁTæ}æ *^ { ^}cÁÜ^•c^ { •                       | €Ä              |                 | FíÄ            |                |
| í€í     | Pæc~!æ ÁÜ^• [ ~!&^Áæ}ááÖ}çá! [ ] { ^}cæ  Ö& [ ] [ á&•          | €Ä              |                 | íÄ             |                |
| í€J     | Ö& [ ] [ { á&ÁV@^ [ !^Áæ}ááT^c@ [ á•                           | €Ä              |                 | ìÄ             |                |
|         | <b>Total</b>   | F€€Ä            |                 | F€€Ä           |                |

**V(C). Planned Program (Inputs)**

**1. Actual amount of FTE/SYs expended this Program**

| Year: 2011                 | Extension |      | Research |      |
|----------------------------|-----------|------|----------|------|
|                            | 1862      | 1890 | 1862     | 1890 |
| Ú æ}                       | H€€       | €€€  | €€G      | €€€  |
| CE&c~æ ÁÜæááÚ! [-^••á [ }æ | F€€       | €€€  | €€Í      | €€€  |
| CE&c~æ ÁX [  ~}c^^!        | €€F       | €€€  | €€€      | €€€  |

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]}clÔ [ { ää}^äÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•hæ}ä!Ü^•~|c•

| Extension             |                       | Research              |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|
| Smith-Lever 3b & 3c   | 1890 Extension        | Hatch                 | Evans-Allen           |
| î í í F I             | €                     | G€ííí                 | €                     |
| <b>1862 Matching</b>  | <b>1890 Matching</b>  | <b>1862 Matching</b>  | <b>1890 Matching</b>  |
| F F G Ì F G           | €                     | Jíííí                 | €                     |
| <b>1862 All Other</b> | <b>1890 All Other</b> | <b>1862 All Other</b> | <b>1890 All Other</b> |
| Ï F I Ì €             | €                     | €                     | €                     |

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

AAAAAAAA

GEFFAW}äç^!•öc^Ä[-ÄX^! { [ ]}clÖ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^••ä [ }ÁCE} }~æ|áÜ^ [ !:cÄ[-ÁCE&& { [ ]}i•@ { ^}c•hæ}á!Ü^•~|c•  
 ÁÁÁÁÁÁÁÁÁÁÖ [ Á } [ cÄ@æç^!á!æcæÁc [ Á& [ { ]|^c^Ác@ä•!•^&cä [ }

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2011   | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|--------|------------------------|--------------------------|-----------------------|-------------------------|
| Actual | 11€                    | 61€€€                    | 71€                   | €                       |

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Y^æ!K                      GEFF  
 CE&c~æ|K                      €

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2011   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Actual | €         | F        | F     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Ö [ ] • ~|cæcä [ ]

**Year**                      **Actual**  
 GEFF                      FF

**Output #2**

**Output Measure**

Ö^ { [ ] } • c|æcä [ ]

**Year**                      **Actual**  
 GEFF                      I



GEFFAW}äç^!•ic^Ä[-ÄX^! { [ ]clÖ [ { ää}^äÜ^•^æ!&@kæ}ä!Öçc^}•ä [ }ACE)}~æ|Ü^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•kæ}ä!Ü^•~|c•

| Year | Actual |
|------|--------|
| GEFF | IH     |

**Output #10**

**Output Measure**

Y [ !\•@ [ ]ÄÄ!•ä } \*|^Ä•^••ä [ }

| Year | Actual |
|------|--------|
| GEFF | GI     |

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@kæ)ä!Öçc^}•ä [ }ÄCE)} ~æ|ÄÜ^] [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ)ä!Ü^•~|c•

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ] cÄÖ [ { ää}^äÜ^•^æ!&@Äæ} ä!Öçc^••ä [ }ÄCE} } ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& { [ ]!ä•@ { ^}c•Äæ} ä!Ü^•~|c•

|    |   |
|----|---|
| Fì | <p>             Þ~ { à^!Ä[-Ä~ } ä^! *!æä~ æc^Ä•c~ ä^}c•Ää}Äc@^Ää^ç^ [ [ ] { ^}cÄÄ  æ} } ä} *ÉÄæ} äÄä { ] ^ { ^} cæcä [ } Ä[-<br/>             { ää Äæ} äÄä* @Ä•&amp;@ [ [  Ä , æc^!•@^äÄ^ä~ &amp;æcä [ } Ä ] ! [ *!æ { •           </p> |
|----|---|

Þ~ { à^!Ä[-Ä!^~^•c•Ä- [ !Ää }~ [ ! { æcä [ } Ä [ !Äc^&@ } ä&æ|Äæ••ä•cæ} &^Ä- [ !Ä^ä~ &æcä [ ] æ|Ä , æc^!•@^ä  
 •c^ , æ!ä•@ä ] Ä ] ! [ b^&c•Ä [ !Ää { ]|^ { ^} cæcä [ } Ä [-Ä , æc^!Ä~ ~æ|äc^Ää { [ ] ! [ ç^ { ^} cÄ ] ! [ b^&c•

G€FFÄW}äç^!•äc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@kæ}ä!Öçc^}•ä [ }ÄCE} } ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ}ä!Ü^•~|c•





G€FFÄW)äç!•öc^Ä[-ÄX^! { [ ]cÄÖ [ { äi}^äÄÜ^•^æ!&@Äæ}ä!Öçc^•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•Äæ}ä!Ü^•~|c•

] |æ&^Ää}Ä] ~ä|ä&Äæ}ä!Ä@ [ { ^!•&@ [ [ |Ä] ! [ \*!æ { •Äæ•Ä, ^|Äæ•Ä] ! [ \*!æ { •Ä- [ !Ä•c! ~ \*\*|ä } \*Ä^ [ ~ c@ÉÄÄQ}Äæäâäcä [ }  
H I Ä ~ } ä! \*!æä•Ä-! [ { ÄX^! { [ ]cÄ& [ | ^\*^•Ä] æ!cä&ä} æc^ä!Ää} Äc@^Ä] ! [ \*!æ { ÉÄÄU} ^Ä!^c~! } ä } \*Ä^æ&@^!Ä, ! [ c^É  
ÄQÄ^Ä|ä^ç^Äc@æcÄæ ] ] |ä^ä!-ä^|ä!^ç } ^!ä^ } &^Äæ!^Äc@^Äà^•cÄ, æ^Ä- [ !Ä•c~ä^ } c•Äc [ Ä|^æ! } Äæà [ ~ cÄc@^  
^ } çä! [ ] { ^ } cÄæ } ä!^ } çä! [ ] { ^ } cæ|Ä•&ä^ } &^ÉÄÄ Y äc@ [ ~ cÄ] ! [ \*!æ { •Ä• ~ &Äæ•ÄWX T Ä Y CEÄäcÄä•Ää~ä&~|cÄc [  
æ~ [ !äæà!^Äæ&&^••Äc@^Ä { æc^!äæ|•Äæ } ä!Ä!^• [ ~ !&^•Ä } ^&^••æ!^Äc [ Ä& [ ] ä~&cÄc@^•^Ä!^ç } ^!ä^ } &^•ÉÉÉÄäcÄä•  
ä } çæ|~æà!^Ä- [ !Ä•c~ä^ } c•Äc [ Ää } c^!æ&cÄ, äc@Ä•&ä^ } cä•c•Äæ } ä!Ä& [ | ^\*^Ä~ } ä!^!æä~æc^•ÉÉÄÄ

4. Associated Knowledge Areas

| KA Code | Knowledge Area                                      |
|---------|---|
| FFG     | Y æc^!•@^äÄÜ! [ c^&cä [ ] Äæ } ä! T æ } æ*^ { ^ } c |

Outcome #7

1. Outcome Measures

P ~ { ä^!Ä [-Ä { ~ } ä&ä } æ|Ä [ ~ä&äæ|•Ä@æç^Äæ } Ää } &!^æ•^äÄ~ } ä!^•cæ } ä! } \*Ä [-Äæ } äÄ } ^^äÄ- [ !Ä] æc~!æ|Ä!^• [ ~!&^  
äæ•^äÄ] [æ } } ä } \*Äæ } ä!Äc [ ! { , æc^!Ä { æ } æ\*^ { ^ } cÄæcÄc@^Ä { ~ } ä&ä } æ|Ä|^ç^!  
P [ cÄÜ^ ] [ !cä } \*Ä [ ] Äc@ä•ÄU~c& [ { ^Ä T ^æ•~!^

Outcome #8

1. Outcome Measures

P ~ { ä^!Ä [-Ä { ~ } ä&ä } æ|äcä^•Ää } c^\*!æcä } \*Ä } æc~!æ|Ä!^• [ ~!&^Ä] ! [ c^&cä [ ] Äæ } ä!Š [ , ÄQ { ] æ&cÄÖ^ç^| [ ] { ^ } c  
•c!æc^\*ä^•Ää } Äc [ , } Ä] |æ } •Äæ } ä!Ä [ !äâ } æ } &^•  
P [ cÄÜ^ ] [ !cä } \*Ä [ ] Äc@ä•ÄU~c& [ { ^Ä T ^æ•~!^

Outcome #9

1. Outcome Measures

P ~ { ä^!Ä [-Ä { [ ] } É!^•ä^ } cäæ|Ä] ! [ ] ^!cä^•Äçä~ •ä } ^••ÉÄä } •cäc~cä [ ] æ|Ä!^•ä!^ } cäæ|Ä& [ { { [ ] •DÄ~ } ä^!Ä [ ] ^Ä! }  
{ [ !^Ä [ , Ää } ] ~cDÄ } [ Ä] @ [ • ] @ [ ! [ ~ •Ä|æ, } Ä&æ!^Ä] !æ&cä&^•  
P [ cÄÜ^ ] [ !cä } \*Ä [ ] Äc@ä•ÄU~c& [ { ^Ä T ^æ•~!^

Outcome #10

1. Outcome Measures

P ~ { ä^!Ä [-Ä] æ!cä&ä } æ} cÄ@ [ ~!•Ä!^•c [ !ä } \*Ä!ä } æ!äæ } Ä@æäcæcÄc@! [ ~\*Ä•c^, æ!ä•@ä] Äæ&cäçäcä^•É  
P [ cÄÜ^ ] [ !cä } \*Ä [ ] Äc@ä•ÄU~c& [ { ^Ä T ^æ•~!^

G€FFÁW}áç^!•íc^Á[-ÁX^! { [ ]cÁÔ [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•Áæ}á!Ü^•~|c•

### **Outcome #11**

#### **1. Outcome Measures**

Ʈ~ { à^!Á [-Á!^•äâ^} &äæ|Á@ [ ~•^@ [ |â•Áæâ [ ]cä } \*Á [ [ , Áä } ] ~cD} [ Á ] @ [ • ] @ [ ! [ [ ~•Á|æ , } Á&æ!^Á ] !æ&cä^•

Ʈ [ cÁÜ^ [ !cä } \*Á [ ] Ác@â•ÁU~c& [ { ^ÁT^æ•~!^

#### **1. Outcome Measures**

Ʈ~ { à^!Á [-Á!^cæä|Áæ , } Áæ} äÁ \*æ!â^} Á&^} c^!•Á ] ! [ çäâä } \*Áä } - [ ! { æcä [ } Á [ ] Á [ [ , Áä } ] ~cD} [ Á ] @ [ • ] @ [ ! [ [ ~•Á|æ , } &æ!^Á [ ] cä [ ] •Ác [ Á&~•c [ { ^!•

G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]}c!Ö [ { ää}^äÄÜ^•^æ!&@Äæ}ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^ [ !:cÄ[-ÄCE&& { [ ]}i•@ { ^}c•Äæ}ä!Ü^•~|c•

**Outcome #13**

**1. Outcome Measures**

▷~ { ä^!Ä [-Ä•&@ [ [ |•Äc@æcÄä^ { [ ]}•c!æc^Äæ}Ää}&!^æ•^Ää}ÉÄ [ !Ää}•cäc~ cä [ ]}æ|ä:æcä [ ]Ä [-ÉÄä}c^\*!æc^äÄ, æc^!•@^ä  
^ä~ &æcä [ ]Ää}c [Ä!^c~!}ä} \*Ä^ä~ &æc [ !:Ä&~!t&~|~ {

**2. Associated Institution Types**

ÄF! ÎGÄÖçc^}•ä [ }

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ ]ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | FH     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**S**

G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^••ä [ }ÄCE) } ~æjÄÜ^ [ !cÄ[-ÄCE&& [ { ]!•@ { ^}c•hæ}ä!Ü^•~|c•

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄCE&cä [ }ÄÜ ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | HÎ     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area                            |
|---------|---|
| FFG     | Yæc^!•@^äÄÜ! [ c^&cä [ }Äæ}ä!Tæ}æ*^ { ^}c |

**1. Outcome Measures**

Ʈ~ { ä^!Ä [-Ä•äc^•Ä , @^!^ÄŠ [ , ÄQ { ]æ&cÄÖ^ç^ [ [ ] { ^}cÄ ]!æ&cä&^•Äæ!^Äà^ä} \*Ä~ •^äÄc [ Ää^&!^æ•^Ä•c [ ! { , æc^!

G€FFÄW}äç^!•öc^Ä[-ÄX^! { [ ]}clÖ [ { ää}^äáÜ^•^æ!&@hæ}ä!Öçc^}•ä [ }ÄCE} } ~æ|ÄÜ^ [ !:cl[-ÄCE&& { [ ]}ä•@ { ^}c•hæ}ä!Ü^•~|c•

## Results

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                |
|---------|---|
| FFG     | Y æc^!•@^ä!Ü! [ c^&cä [ ] Äæ} ä!Tæ} æ*^ { ^}c |

### Outcome #16

#### 1. Outcome Measures

P ~ { ä^!Ä [-Äc [ , ]}•D { ~ }ä&ä]æ|äcä^•Äæ} ä! , æc^!•@^ä! [ !\*æ} ä:æcä [ ]•Ä& [ ] ä ~ &cä} \*Ä [ ~ c!^æ&@Äæ&cäçäcä^•Äæ} ä  
 ]æ!cä&ä]æcä} \*Ää} Ä [ ~ c& [ { ^Ä [ !ä^} c^ä! , æc^!Ä ~ æ|äc^Ä^ä ~ &cäcä [ ]

#### 2. Associated Institution Types

ÄF! ÎGÄÖçc^}•ä [ }

#### 3a. Outcome Type:

Ö@æ} \*^Ää} ÄCE&cä [ ] ÄÜ ~ c& [ { ^ÄT^æ•~!^

#### 3b. Quantitative Outcome

| Year | Actual |
|------|--------|
| G€FF | H      |

#### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                |
|---------|---|
| FFG     | Y æc^!•@^ä!Ü! [ c^&cä [ ] Äæ} ä!Tæ} æ*^ { ^}c |

GEFFAW)äç^!•ic^Á[-ÁX^! { [ ]}c!Ö [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ ]ÁCE} }~æ!áÜ^ [ !c![-ÁCE&& [ { ]}|ä•@ { ^}c•kæ}á!Ü^•~|c•

**Outcome #17**

**1. Outcome Measures**

Þ~ { à^!Á[-Ác [ ] }•ð { ~ }ä&ä]æ|äcá^•Á~•ä} \*Á [ ]^Á [!Á { [ !^!ää [ ^ } \*ä } ^!ä } \*Á { ^c@ [ ä•Á- [ !Á•@ [ !^!ä ]^ •cæä!ä : æcä [ ] Ác [ Áä^&!^æ•^!Á^! [ •ä [ ] Áæ } äÁ•^!ää { ^ } cæcä [ ]

**2. Associated Institution Types**

ÁF! ÎG!Öçc^}•ä [ ]

**3a. Outcome Type:**

Ö@æ} \*^!ä}ÁCE&cä [ ]ÁU~c& [ { ^!T^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| GEFF | G      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area                                    |
|---------|---|
| FFG     | Yæc^!•@^!á!Ü! [ c^&cä [ ] Áæ } ä!Tæ } æ*^ { ^ } c |

**Outcome #18**

**1. Outcome Measures**

Þ~ { à^!Á[-Á~ } ä^! \*!æä~æc^!•c~ ä^ } c•!ä } Ác@^!á^ç^! [ [ ] { ^ } cÉ! ] |æ } } ä } \*É!æ } ä!ä { ] |^ { ^ } cæcä [ ] Á [-! { ä!ä!^ æ } ä!ä!ä \* @!•&@ [ [ ] Á , æc^!•@^!á!á~&æcä [ ] Á ] ! [ \*!æ { •

Þ [ c!Ü^ [ !cä } \*Á [ ] Ác@ä•ÁU~c& [ { ^!T^æ•~!^

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÜ^•^æ!&@kæ)ä!Öçc^}•ä [ }ÄCE)} ~æ|ÄÜ^ [ !:cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•kæ)ä!Ü^•~|c•

## 1. Outcome Measures



G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äáÜ^•^æ!&@Äæ}ä!Öçc^•ä [ }ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]!•@ { ^}c•Äæ}ä!Ü^•~|c•

**KA Code** Knowledge Area  
FFG Y æc^!•@^äÁÚ! [ c^&cä [ ]Äæ}ä!Tæ}æ\*^ { ^}c

**Outcome #20**

**1. Outcome Measures**

Ö^ç^ [ [ ]Ä^& [ [ { ä&Ää }•cäc~cä [ ]•Äc@æcÄ!^ , æ!ä!c@^Ä! [ !çä•ä [ ]Ä[-Ä^& [ •^•c^ { Ä•^!çä&^•È  
B [ cÄÜ^ [ !cä ] \*Ä [ ] Äc@ä•ÄÜ~c& [ { ^ÄT^æ•~!^

**Outcome #21**

**1. Outcome Measures**

Øæ&äljæccä } \* Äc@^ÄÖ^ç^ [ [ ] { ^}cÄ [-ÄÜcæ\^@ [ !ä^!Èä!äç^}ÈÄÜ^!- [ ! { æ }&^Èäæ•^äÈÄÜ^!- [ ! { æ }&^Èäæ•^ä  
Ü [ !ä&ä^Ä- [ !ÄCE\*!ä&~|c~!æ|ÄB [ ] [ ä ]cÄÜ [ ~!&^ÄÜ [ !cä [ ]ÄÖ [ ]c! [ !È

**2. Associated Institution Types**

ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄS} [ , |^ä \*^ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | GÍ     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ö~!|^}cÄ& [ ]•^!çæcä [ ]Äæ [ ]! [ æ&@^•Ää [ Ä ] [ cÄ- [ &~•Ä [ ]Ä^}çä! [ ] { ^}cæ|Ä [ ~c& [ { ^•Äæ}ä!Ä [ Ä ] [ cÄ ]! [ çää^  
-æ! { ^!Ä-|çää!äc^Ä•~ä&ä^}cÄ [ Ää } ä~&^Ää } [ çæcä [ ]Ä [ !Ä•^^Ä|Äæ•cÈ& [ •cÄ• [ |~cä [ ]•È

**What has been done**

Ö^ç^ [ [ ]^äÄ^ä~&æcä [ ]æ|Äæ}ä!Ä [ ~c!^æ&@Ä { æc^!äæ!•Ä [ ]Äc@^Äc@^ [ !^Äæ}ä!Ä ]!æ&cä&^Ä [-Ä]Ä!- [ ! { æ }&^Èäæ•^Ä  
æ [ ]! [ æ&@^•Ä- [ !Ä& [ ]c! [ !Ä [-Äæ\*!ä&~|c~!æ|ÄÖ^ç^ [ [ ]^äÄæÄÜÖÜCEÄY^ä•äc^Äæ•ÄæÄÖ|Äæ!ä } \*@ [ ~•^Ä- [ !  
Q) - [ ! { æcä [ ]LÄÖ }@æ} &^äÄæ}ä!Ö [ &~ { ^}cÄÜcæ\^@ [ !ä^!ÈÜ&ä^}cä-ä&ÄÜ [ !ä&^ÄÖ^ç^ [ [ ] { ^}cÄ^••ÈÈ  
Ö [ ]ä~&c^äÄ^ä~&æcä [ ]Äæ}ä!Ä [ ~c!^æ&@Äæ&cäçäcä^•Äc@! [ ~\*@ [ ~cÄc@^ÄWEUEÄÄÖ^ { [ ]•c!æc^äÄc@^ÄÜÖÜCE  
æ [ ]! [ æ&@ÄæÄc@^Ä , æc^!•@^äÈ|Äç^!Äc@! [ ~\*@ÄÖÜÜÖÖÜÄÜ^\*ä [ ]æ|ÄYæc^!ÄÜ~æ|äc^ÄÜ! [ !^&c•LÄÖ [ ]ä~&c^äÄæ  
Bæcä [ ]æ|ÄÜÖÜCEÄY [ !\•@ [ ]ÈÄæ}ä!Ö [ { ]ä!^ä|Ä^•• [ ]•Ä!Äæ!}^äÄæ}ä!Ä!^æc^Ä [ !ä&^Ä!^& [ { { }^äæcä [ ]•Ä- [ !  
c@^Ä~•^Ä [-Ä]Ä!- [ ! { æ }&^Èäæ•^äÄä} &^}cäç^•È

**Results**

Ü~!Ä [ !!^&cÄä^}cä-ä^äÄæ}ä!Ä { æ|Ää!Ä!Ä , æc^!•@^äÄ [ !!ää}æc [ !•Ä , äc@Ää }- [ ! { æcä [ ]Äæä [ ~cÄc@^Ä& [ ]&^}c

G€FFÄW}äç^!•ic^Ä[-ÄX^! { [ ] cÄÖ [ { äi}^äÜ^•^æ!&@hæ} ä!Öçc^}•ä [ }ÄCE} }~æ|ÄÜ^] [ !cÄ[-ÄCE&& [ { ] |i•@ { ^}c•hæ} ä!Ü^•~|c•  
[-Ä]^!~ [ ! { æ} &^È àæ•^äÄä } &^} cäç^•Äæ} äÄc@^Ä•^!çä&^•Äc@æcÄ [ ~ !Ä ] ! [ b^&cÄ@æ•Äc [ Ä [ ~^!ÈÄB~ { ^! [ ~•

G€FFÄW)äç^!•ic^Ä[-ÄX^! { [ ]c}Ö [ { ää}^äÄÜ^•^æ!&@hæ}ä!Öçc^••ä [ }ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& { [ ]!•@ { ^}c•hæ}äÄÜ^•~|c•

**V(A). Planned Program (Summary)**

**Program # 7**

**1. Name of the Planned Program**

Ö|ä { æc^ÄÖ@æ } \*^

**V(B). Program Knowledge Area(s)**

FÈÄÜ! [ \*!æ { ÄS } [ , |^ä \*^ÄCE!^æ•hæ} äÄÜ^!&^ } cæ \*^

| KA Code | Knowledge Area  | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---|-----------------|-----------------|----------------|----------------|
| F€H     | T æ} æ *^ { ^ } cÄ [-AUæ ä} ^hæ} äÄÜ [ ää&ÄÜ [ ä  •æ} äÄÜæ ä} äc^             | €Ä              |                 | I Ä            |                |
| FFG     | Y æc^!•@^äÄÜ! [ c^&cä [ ] Äæ} äÄTæ} æ *^ { ^ } c                              | €Ä              |                 | F Ä            |                |
| FGH     | T æ} æ *^ { ^ } cÄæ} äÄÜ •cæä} æä äc^Ä [-ÄÖ [ !^•c Ü^• [ ~!&^•                | €Ä              |                 | G I Ä          |                |
| FGÍ     | CE *! [ -!^•c! ^  | €Ä              |                 | Í Ä            |                |
| FHF     | CE c^!} æcäç^ÄW•^•Ä [-ÄŠæ} ä  | €Ä              |                 | I Ä            |                |
| FHH     | Ú [     ~ cä [ ] ÄÜ! ^ç^ } cä [ ] Äæ} äÄT äcä *æcä [ ]                        | €Ä              |                 | F Ä            |                |
| FHÍ     | Ö [ ] •^! çæcä [ ] Ä [-ÄÖä [   [ * ä&æ ÄÖäç^! •äc^                            | €Ä              |                 | F Í Ä          |                |
| G€G     | Ú æ} cÄÖ^ ^cä&ÄÜ^• [ ~!&^•  | €Ä              |                 | I Ä            |                |
| G€Í     | Ú æ} cÄTæ} æ *^ { ^ } cÄÜ^•c^ { •   | €Ä              |                 | F Ä            |                |
| G€Í     | Óæ•ä&ÄÜ æ} cÄÖä [   [ *^  | €Ä              |                 | J Ä            |                |
| GFF     | Q} •^&c•ÉÄT äc^•ÉÄæ} äÄÜc@^!ÄCE!c@! [ ] [ ä•CE--^&cä} *ÄÜ æ} c•               | €Ä              |                 | FG Ä           |                |
| GFH     | Y ^^ä•ÄCE--^&cä} *ÄÜ æ} c•  | €Ä              |                 | G Ä            |                |
| í€F     | P^, Äæ} äÄÜ { [ ] [ ç^äÄÖ [ [ äÄÜ! [ &^••ä } *V^&@} [   [ *ä^•                | €Ä              |                 | Í Ä            |                |
| í€F     | Ö& [ ] [ { ä&•Ä [-ÄCE *!ä&~ c~!æ ÄÜ! [ ä~&cä [ ] Äæ} äÖæ! { ÄTæ} æ *^ { ^ } c | €Ä              |                 | F Ä            |                |
| í€I     | T æ! \^cä} *Äæ} äÄÖä•c! ää~cä [ ] ÄÜ!æ&cä&^•                                  | €Ä              |                 | H Ä            |                |
| í€I     | Pæc~!æ ÄÜ^• [ ~!&^Äæ} äÄÖ} çä! [ ] { ^ } cæ Ö& [ ] [ { ä&•                    | €Ä              |                 | H Ä            |                |
| í€J     | Ö& [ ] [ { ä&ÄV@^ [ ! ~Äæ} äÄT^c@ [ ä•  | €Ä              |                 | G Ä            |                |
|         | <b>Total</b>  | €Ä              |                 | F€€Ä           |                |



GEFFAW}äç^!•ic^Á[-ÁX^! { [ ]}clÔ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]}|ä•@ { ^}c•kæ}á!Ü^•~|c•

**1. Standard output measures**

| 2011   | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|--------|------------------------|--------------------------|-----------------------|-------------------------|
| Actual | €                      | €                        | €                     | €                       |

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

ÿ^æ!K                      GEFF  
 CE&c~æ!K                      €

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2011   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Actual | €         |          |       |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Ü&ä^}cä-ä&ÁR [ ~! }æ|•

**Year**                      **Actual**  
 GEFF                      H

GEFFAW}äç^!•öc^Á[-ÁX^! { [ ]}cáÔ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^••ä [ }ÁCE} }~æ!áÜ^ [ !:cÁ[-ÁCE&& { [ ]}i•@ { ^}c•hæ}á!Ü^•~|c•

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME  |
|--------|---|
| F      | Ú [c^}cäæ/Áäâ•!~ ]cä [ }Á [-Ác@^Á} [ ! { æ!Á]@^•ä [ [ *ä&æ!Á]! [&^••^•Á [-Áä^ç^  [ ] { ^}cÁä}Á•~ *æ!Á { æ}   ^•É      |
| G      | Ú!^ââ&cä} *Áä}çæ•äç^}^••Á [-Áä}c! [ ä~&^âÁ•]^&â^•Áä}c [ Á& [ { { ~}äcá^•  |
| H      | V!æäççæ!äæcä [ }Áæ&! [ ••Á•]^&â^•Á!æ} *^KÁ^ç]  æä}â} *Áä}çæ•äç^Áäâ--^!^}&^•   |
| I      | Ú! [b^&cä} *Á& ä { æc^Á&@æ} *^Áä { ]æ&c•Á [ }ÁX^! { [ ]}cÁ- [ !^•c•Á~ •ä} *Áä^}æ { ä&ç^•^cæcä [ }Á { [ ä^!•           |
| í      | Ô ä { æc^ÁÜæ} *^ÁÖç]æ}•ä [ }Áä~!ä} *Á& [ [ ]}ä: æcä [ }Á [-ÁæÁ { æb [ !Á& [ [ ]Á]^•cÉÁÔ [ [ !:æä [ Á] [ cæc [ Áä^c  ^ |

G€FFÁW}áç^!•ic^Á[-ÁX^! { [ ]cáÔ [ { áá}^ááÜ^•^æ!&@áæ}ááÔçc^}•á [ }ÁCE} } ~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]|á•@ { ^}c•áæ}ááÜ^•~|c•

**Outcome #1**

**1. Outcome Measures**

Ú [c^}cáæ|Ááá•! ~ ] cá [ }Á [-Ác@^Á} [ ! { æ|Á] @ ^ •á [ [ \*á&æ|Á] ! : &^••^•Á [-Áá^ç^ [ [ { ^} cáá}Á • ~ \*æ!Á { æ] | ^ • È

**2. Associated Institution Types**

ÁF Ì Î G Á Ü ^ • ^ æ ! & @

**3a. Outcome Type:**

G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]cÄÖ [ { ää}^äÄÜ^•^æ!&@hæ}äÄÖçc^••ä [ }ÄCE) } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]|ä•@ { ^}c•hæ}äÄÜ^•~|c•

**KA Code**    **Knowledge Area**  
G€Î            Óæ•ä&ÄÜ|æ}cÄÓä [ | [ \* ^

**Outcome #2**

**1. Outcome Measures**

Ú!^äâ&cä} \*Ää}çæ•äç^}^••Ä [-Ää}c! [ ä ~ &^äÄ• ] ^&ä^•Ää}c [ Ä& [ { { ~ } äcä^•  
P [ cÄÜ^ ] [ !cä } \*Ä [ ] Äc@ä•ÄÜ~c& [ { ^ÄT^æ•~!^

**Outcome #3**

**1. Outcome Measures**

V!æäÄçæ!äæcä [ ] Äæ&! [ ••Ä• ] ^&ä^•Ää} \*^KÄ^ç |æä} ä } \*Ää}çæ•äç^Ää~^!^} &^•  
P [ cÄÜ^ ] [ !cä } \*Ä [ ] Äc@ä•ÄÜ~c& [ { ^ÄT^æ•~!^

**Outcome #4**

**1. Outcome Measures**

Ú! [ b^&cä } \*Ä&|ä { æc^Ä&@æ } \*^Ää { ]æ&c•Ä [ ] ÄX^! { [ ] }cÄ- [ !^•c•Ä~•ä } \*Ää^ }æ { ä&Äç^•^cæcä [ ] Ä { [ ä^•

**2. Associated Institution Types**

ÄFì ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ} \*^Ää}ÄS} [ , |ä~\*^ÄÜ~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | Í      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ö! [ äæ|Ä&|ä { æc^Ä&Ää }Äc@^Ä { ää•cÄ [-Ää} ääÄ&@æ } \*^Äæ•• [ &äæc^äÄ , äc@Ää }&!^æ•ä } \*Ä& [ ] &^ }c!æcä [ ] Ä [-  
æc { [ • ] @^!ä&Ä\*!^ } @ [ ~ •^Ä\*æ•^•ÉÄÄØ [ !^•c•Äæ&! [ ••ÄB^ , ÄÖ } \*|æ } äÄæ!^Ä^ç ] ^&c^äÄc [ Ä!^• ] [ ] äÄc [ Ä&|ä { æc^  
&@æ } \*^ÉÄÄØ [ !^•c^!•Äæ } äÄæ\*!ä&~|c~!æ|Ä-æ! { ^!•Ä , [ ~ |äÄ^Ä& [ ] &! } ^äÄ!^\*æ!ää } \*Ä&@æ } \*^•É

**What has been done**



G€FFÄW)äç^!•öc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ}äÄÖçc^•ä [ ]ÄCE} }~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]}ä•@ { ^}c•Äæ}äÄÜ^•~|c•

Uäb^&cäç^Ää•Äc [ Ää { ]! [ ç^Äc@^Ä^~ä&æ&^Ä [-Ä { Ä [ ä^|Ä ]! [ b^&cä [ ] }•Ä [-Äç^•^cæcä [ ] Ää•c!ä~cä [ ] æ|Ä•@ä-c•Ää }  
!^• [ ] }•^Äc [ Ä^ç ]^&c^äÄ&|ä { æc^Ä&@æ } \*^ÉÄÄCE••••^äÄc@^Ää~|~^ }&^Ä [-Ä• ]æcäæ|Ä!^~|c~cä [ ] Ä [-Ä { [ ä^|  
]! [ b^&c•É

**Results**

W•^äÄç^•^cæcä [ ] Ä { [ ä^|•Äc [ Ä ]! [ b^&cÄc@^Ä!^•• [ ] }•^•Ä [-Ä- [ !^•c•Äæ&! [ ••Äb^, ÄÖ ] \*|æ } äÄæ } äÄ ]! [ b^&cçc^ä  
c@æcÄc@^Ä&|ä { æc^Ä [-Äb^, ÄÖ ] \*|æ } äÄ, ä|Ä& [ ] cä } ~^Äc [ Ä, æ! { Ä!æ ] ää|^Ä [ ç^Ä!Äc@^Ä&~!^ } cÄ&^ } c~!^ÉÄÄÖ [ !^•c•  
, ä|Ä!^•• [ ] } äÄ, äc@Äæä \*^ } ^!æ|Ä•@ä-cÄc [ Ä@ä\* @!Ä!Ä^çcæcä [ ] }•Äæ } äÄ { [ !^Ä ] [ !c@^!|^Ä|æcäc~ä^•É

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area   |
|---------|--|
| FGH     | Tæ } æ*^ { ^ } cÄæ } äÄÜ~•cæä } æä äçc^Ä [-ÄÖ [ !^•cÄÜ^• [ ~!&^• |
| G€G     | Ú æ } cÄÖ^ } ^cä&ÄÜ^• [ ~!&^•                                    |

**Outcome #5**

**1. Outcome Measures**

Ö|ä { æc^ÄÜæ } \*^ÄÖç } ä [ ] Ää~!ä } \*Ä& [ [ ] } ä:æcä [ ] Ä [-ÄæÄ { æb [ !Ä&! [ ] Ä ] ^•cÉÄÖ [ [ !æä [ Ä ] [ cæc [ Ää^c|^

**2. Associated Institution Types**

ÄF! ÎGÄÜ^•^æ!&@

**3a. Outcome Type:**

Ö@æ } \*^Ää } ÄS } [ , |^ä \*^ÄU~c& [ { ^ÄT^æ•~!^

**3b. Quantitative Outcome**

| Year | Actual |
|------|--------|
| G€FF | F€     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Ö [ [ !æä [ Ä ] [ cæc [ Ää^c|^Ää•ÄæÄ ] [ c [ !ä [ ~•|^Ää~ä&~|cÄä }•^&cÄc [ Ä& [ ] c! [ !ÉÄÄ Y @ä|^Äc@^!^Äæ!^Ä& [ ] ç^ } cä [ ] æ|Äæ } ä  
[ ! \*æ } ä&Ä ] ^•cä&ä^•Äc@æcÄ& [ ] c! [ !Äc@^Ää^c|^ÄÄ• [ { ^Ää^c|^Ä ] [ ] ~|æcä [ ] }•Ä@æç^Äæ|!^æä^Ää^ç|^ [ ] ^ä  
!^•ä•cæ } &^Äc [ Äc@^•^Ää }•^&cä&ä^•ÉÄÄÖ [ { ä } äæcä [ ] Ä [-Ä, æ! { ^!Ä, ä } c^!•Äæ } äÄ ] ^•cä&ä^Ä!^•äcæ } &^Ä@æç^Ä  
&!^æc^äÄ ]! [ ä|^ { •ÉÄÄCE\*!ä&~|c~!æ|Ä-æ! { ^!•Äæ!^Ä& [ ] &^! } ^äÉ

**What has been done**

Y^Ä^çæ { ä } ^äÄ@ [ , Ä&|ä { æcä&Äæ } äÄä [ cä&Ä-æ&c [ !•Ä@æç^Ää ]-|~^ } &^äÄÖÜÖÄ \*^ [ !æ ] @ä&Ä!æ } \*^Ä^ç } ä [ ]  
æ } äÄ- [ !^&æ•^Ä@ [ , Ä&|ä { æc^Ä&@æ } \*^Ä { æ^Ää ]-|~^ } &^Äc@^Äæä~ } äæ } &^Äæ } äÄä•c!ä~cä [ ] Ä [-Ää^c|^  
] [ ] ~|æcä [ ] }•Ää } Äc@^Ää~c~!^É

**Results**

G€FFÄW}äç^!•öc^Ä[-ÄX^! { [ ]}cÄÖ [ { ää}^äÄÜ^•^æ!&@Äæ}äÄÖçc^••ä [ }ÄCE} } ~æ|ÄÜ^ [ !cÄ[-ÄCE&& [ { ]}|ä•@ { ^}c•Äæ}äÄÜ^•~|c•

U ~ !Ä-ä}ää} \*•Ä , @ [ , Äc@æcÄ\*^ [ \*!æ ] @ä&Äçæ!äæcä [ }Äæ { [ ] \*Ää^c|ÄÄ [ [ ] ~|æcä [ ] •Ä { ^æ} •Äc@æcÄä^c|Ä•Ä { æ^  
@æç^Ä~ }ä^! \* [ ] ^Ä•ä\* }ä-ä&æ}cÄ^ç [ | ~ cä [ ] æ! ^Ä&@æ } \*^•Ää } Ä [ !ä^!Äc [ Äæäæ ] cÄc [ Ä ] [ !c@^! } Ä&|ä { æcä&Ä& [ ] ääcä [ ] •É

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area   |
|---------|--|
| G€Í     | Ú æ}cÄ Tæ}æ*^ { ^}cÄÜ^•c^ { •                                  |
| GFF     | Q}•^&c•ÉÄ T äc^•Éäæ}äÄÜc@^!ÄCE!c@! [ ] [ ä•ÄCE~^&cä } *ÄÜ æ}c• |

#### V(H). Planned Program (External Factors)

##### External factors which affected outcomes

Natural Disasters (drought, weather extremes, etc.)

Economy

Appropriations changes

Public Policy changes

Government Regulations

##### Brief Explanation

{No Data Entered}

#### V(I). Planned Program (Evaluation Studies)

##### Evaluation Results

{No Data Entered}

##### Key Items of Evaluation

{No Data Entered}