

Scientific name	<i>Ruppia maritima/cirrhosa</i> saline community
Common name	Beaked/Spiral Tasselweed saline community
Community code	SW1A

Vegetation

This is typically a submerged community dominated by *Ruppia maritima* or *Ruppia cirrhosa*. There are no other constant or frequent vascular species and only a limited number of infrequent associates. These are comprised mainly of other aquatic species, particularly *Potamogeton pectinatus* and *Zostera marina*, or of emergent species, mainly *Phragmites australis*, *Bolboschoenus maritimus* and *Schoenoplectus tabernaemontani*. These swamp plants, however, offer only sparse cover. Charophytes (*Chara* species and *Lamprothamnium papulosum*) are occasionally found in this community.

Ecology

This is predominantly a community of lagoons and coastal saline lakes. *Ruppia*-dominated vegetation has also been observed in salt pans and on coastal mudflats, but little data have yet been collected to describe this aspect of the community.

Sub-communities

No sub-communities are currently described.

Similar communities

This is a very distinct community which should not cause too much confusion. There are some similarities with the FW2F *Potamogeton pectinatus* – *Myriophyllum spicatum* aquatic community, but in that assemblage *Ruppia* is infrequent and *Potamogeton* species tend to dominate. On mudflats (e.g. at Bull Island, Dublin) *Ruppia* expanses may merge into SM1A *Salicornia* agg. saltmarsh.

Records and distribution

Number of records (all)

Clearly assigned:	134
Transitional:	1
Total:	135

Number of records (mapped)

2001-2020:	7
1986-2000:	111
1971-1985:	17
Pre-1971:	0
Total:	135

Number of hectads (by most recent time period)

2001-2020:	2
1986-2000:	26
1971-1985:	1
Pre-1971:	0
Total:	29

Number of hectads (records in each time period)

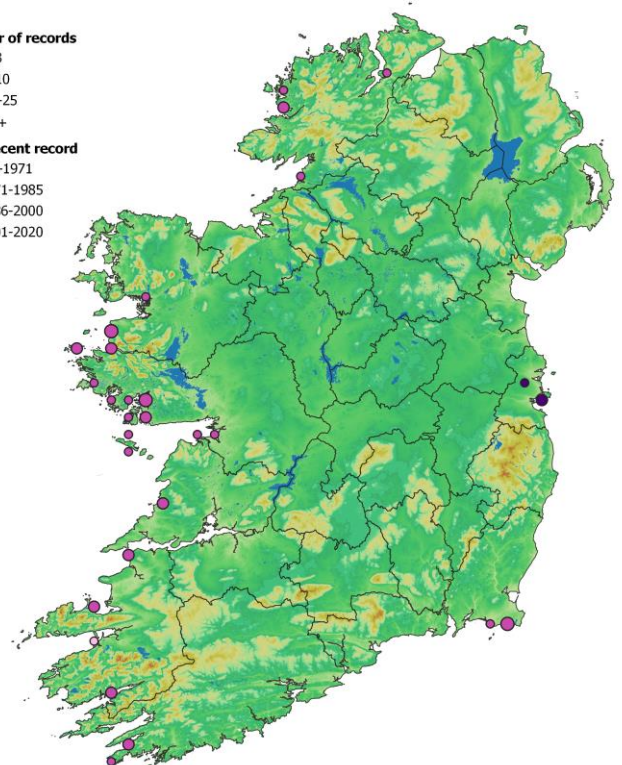
2001-2020:	2
1986-2000:	26
1971-1985:	2
Pre-1971:	0

Number of records

- 1-3
- 4-10
- 11-25
- 26+

Most recent record

- pre-1971
- 1971-1985
- 1986-2000
- 2001-2020



Synoptic table (n = 125)

Species	Frequency	Cover	Species	Frequency	Cover
	(from I-V)	min (med) max		(from I-V)	min (med) max
<i>Ruppia maritima/cirrhosa</i>	V	3-(5)-10			
<i>Potamogeton pectinatus</i>	I	2-(3)-7			
<i>Zostera marina</i>	I	3-(4)-5			
<i>Phragmites australis</i>	I	3-(4)-5			
<i>Bolboschoenus maritimus</i>	I	3-(3)-3			
<i>Salicornia</i> agg.	I	+(2)-3			
<i>Schoenoplectus tabernaemontani</i>	I	2-(2)-4			
<i>Typha latifolia</i>	I	2-(2)-2			
<i>Agrostis stolonifera</i>	I	2-(2)-2			
<i>Carex rostrata</i>	I	2-(2)-2			
<i>Eleocharis palustris</i>	I	2-(2)-2			
<i>Juncus bufonius</i>	I	2-(2)-2			
<i>Mentha aquatica</i>	I	2-(2)-2			
<i>Menyanthes trifoliata</i>	I	2-(2)-2			
<i>Myriophyllum spicatum</i>	I	4-(4)-4			
<i>Phalaris arundinacea</i>	I	4-(4)-4			
<i>Ranunculus flammula</i>	I	2-(2)-2			
<i>Spergularia marina</i>	I	2-(2)-2			
<i>Zannichellia palustris</i>	I	5-(5)-5			
<i>Zostera angustifolia</i>	I	3-(3)-3			

Affinities

GHI: CW1 Lagoons and saline lakes / LS3 Muddy sand shores / LS4 Mud shores

ZM: MC Ruppiaetea maritima J. Tx. ex Den Hartog et Segal 1964 (96.8%)

EUNIS: A2.614 *Ruppia maritima* on lower shore sediment / A5.5341 Middle European *Ruppia* and *Zannichellia* communities

NVC: A21 *Ranunculus baudotii* community (15.1%), but see also SM2 *Ruppia maritima* salt-marsh community

Annex I: 1140 Tidal mudflats and sandflats / 1150 Lagoons*

Proxy environmental data

Light: 7.9 Reaction: 7.0 Wetness: 11.0 Fertility: 6.0 Salinity: 3.9

Conservation value

Most examples of this community occur in water bodies that qualify as EU HD Annex I priority habitat 1150 Lagoons*. Species/1 m² = 1.1, n = 48.

Management

This community is typically unmanaged but is threatened by impacts which affect lagoons, including drainage for purposes of agricultural reclamation, natural siltation and eutrophication.

Key references

Hatch, P. (1996) A survey of the vegetation of Irish coastal lagoons. (unpublished). National Parks and Wildlife Service, Dublin.

Roden, C.M. (1998) A survey of the flora and vegetation of sixteen Irish coastal lagoons. Part three of 1998 lagoon survey. (unpublished). Dúchas, The Heritage Service, Dublin.

Synopsis version: V2.0

Synopsis date: April 2021

Synopsis author(s): P.M. Perrin

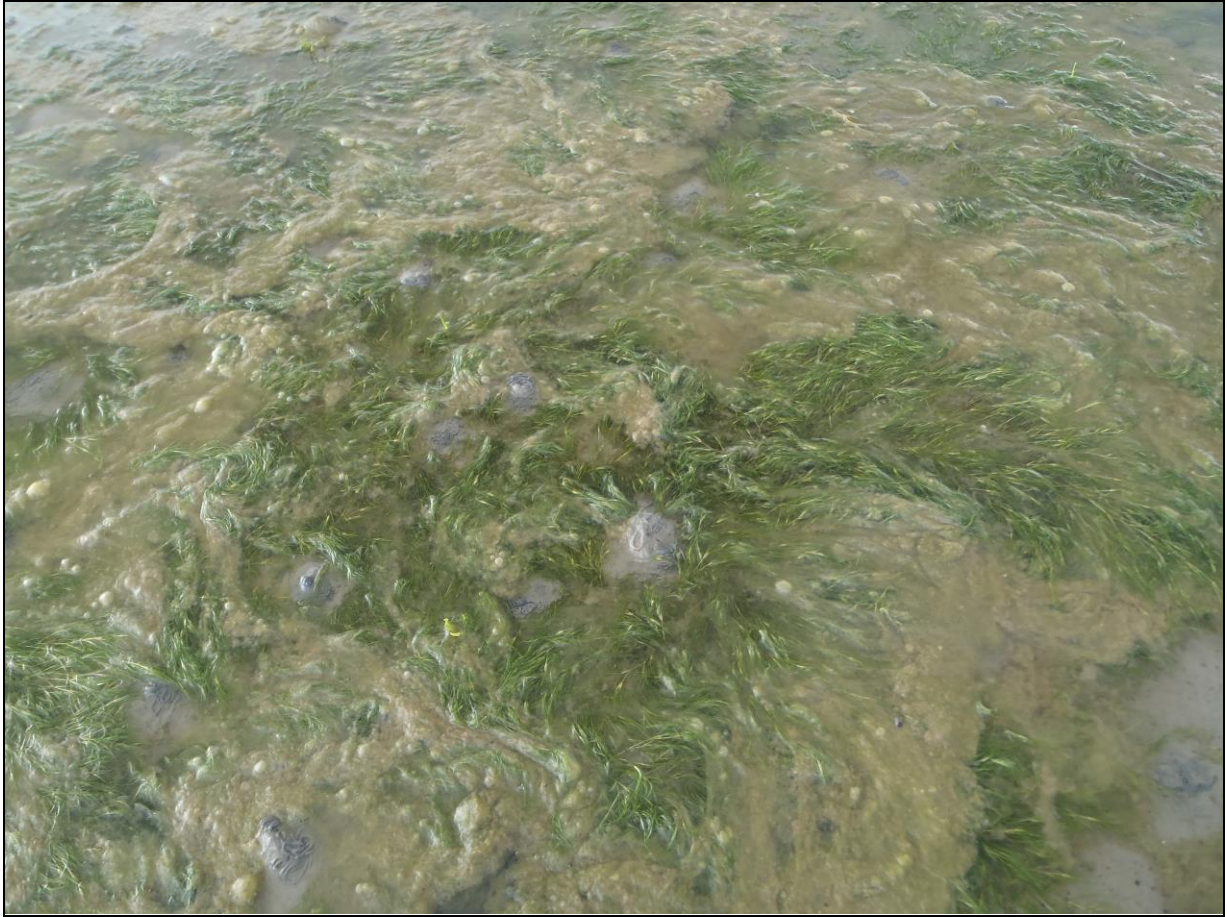


Photo 1. Mudflat vegetation ascribable to SW1A *Ruppia maritima/cirrrosa* lagoon community, North Bull Island, Dublin
(P. Perrin, August 2017)

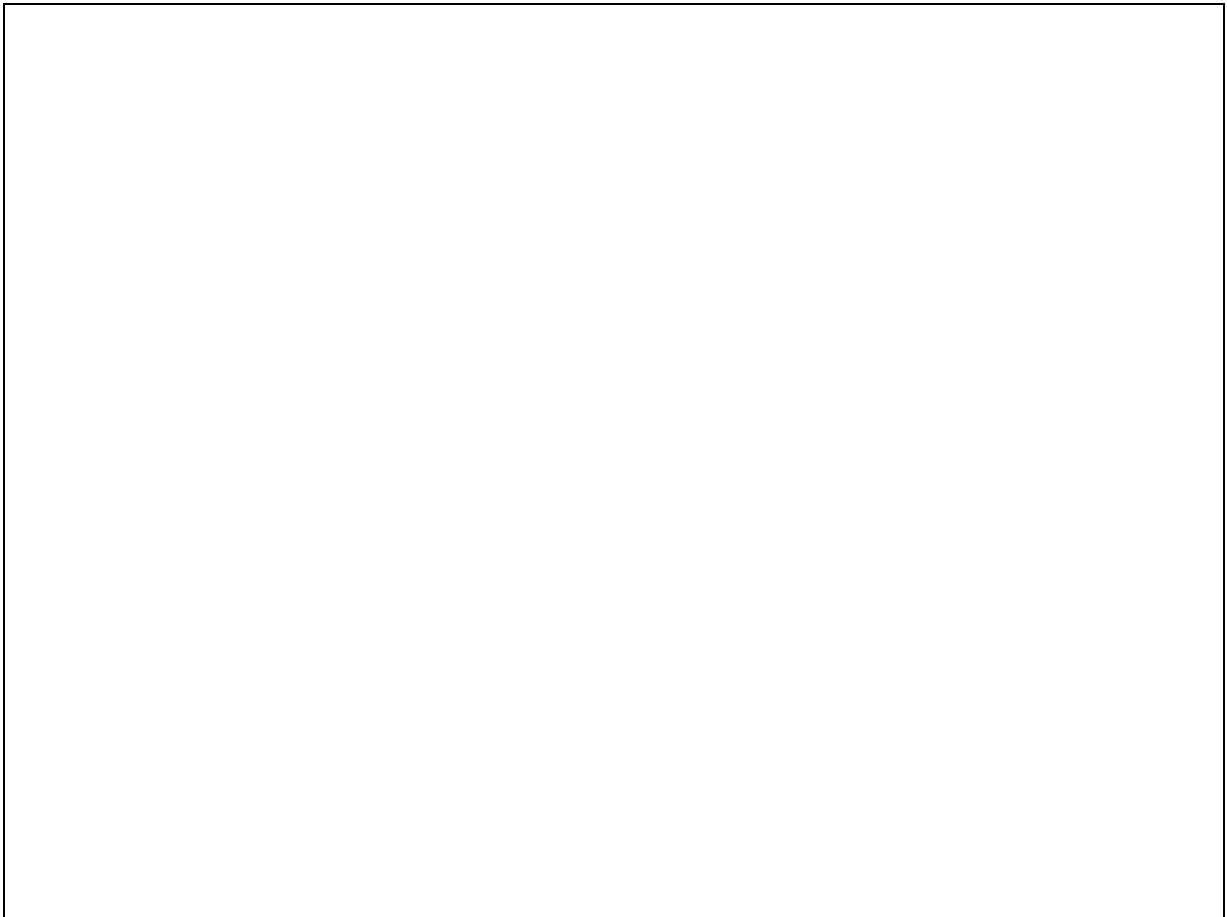


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Scientific name	<i>Zostera marina</i> saline community
Common name	Eelgrass saline community
Community code	SW1B

Vegetation

This simple community consists of beds of the marine angiosperm *Zostera marina*, occasionally accompanied by the growth of *Ruppia marina/cirrhosa*.

Ecology

These beds occur in the subtidal or lower intertidal zone of lagoons and sheltered coastal waters, growing on sand, gravel or sandy mud.

Sub-communities

No sub-communities are currently described.

Similar communities

Zostera marina occurs infrequently in the SW1A *Ruppia maritima/cirrhosa* lagoon community, but there it is usually subordinate to the tasselweed.

Records and distribution

Number of records (all)

Clearly assigned:	7
Transitional:	0
Total:	7

Number of records (mapped)

2001-2020:	0
1986-2000:	7
1971-1985:	0
Pre-1971:	0
Total:	7

Number of hectads (by most recent time period)

2001-2020:	0
1986-2000:	2
1971-1985:	0
Pre-1971:	0
Total:	2

Number of hectads (records in each time period)

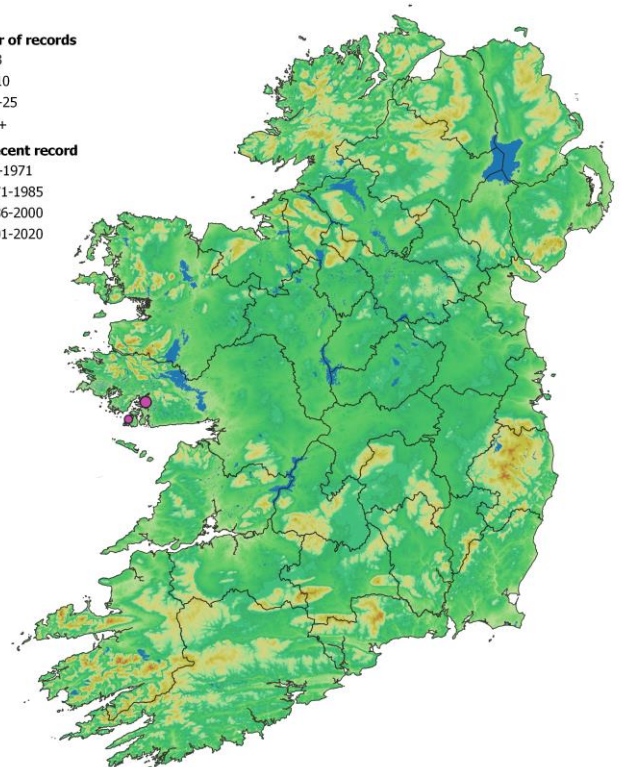
2001-2020:	0
1986-2000:	2
1971-1985:	0
Pre-1971:	0

Number of records

- 1-3
- 4-10
- 11-25
- 26+

Most recent record

- pre-1971
- 1971-1985
- 1986-2000
- 2001-2020



Synoptic table (*n* = 7)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
<i>Zostera marina</i>	V	3-(5)-7			
<i>Ruppia maritima/cirrrosa</i>	II	3-(3)-4			

Affinities

GHI: CW1 Lagoons and saline lakes / LS2 Sand shores / LS3 Muddy sand shores / SS1 Infralittoral gravels and sands
 ZM: MA Zosteretea Pignatti 1953 (85.7%)
 EUNIS: C5.5331 *Zostera marina/angustifolia* beds on lower shore or infralittoral clean or muddy sand
 NVC: A21 *Ranunculus baudotii* community (14.0%), but see also SM1 *Zostera* communities
 Annex I:1140 Tidal mudflats and sandflats / 1150 Lagoons* / 1160 Large shallow inlets and bays

Proxy environmental data

Light: 6.2 Reaction: 7.9 Wetness: 11.9 Fertility: 6.0 Salinity: 7.7

Conservation value

Zostera beds are used in Ireland as bioindicators of ecological quality status for purposes of reporting under the Water Framework Directive (see Wilkes et al. 2017). Species/1 m² = 1.2, *n* = 6.

Management

Intertidal *Zostera* beds can be impacted by vehicular traffic, for example that involved in aquaculture. Eutrophication of coastal waters can lead to smothering of beds by opportunistic algal growth.

Key references

Roden, C.M. (1998) A survey of the flora and vegetation of sixteen Irish coastal lagoons. Part three of 1998 lagoon survey. (unpublished). Dúchas, The Heritage Service, Dublin.
 Hatch, P. (1996) A survey of the vegetation of Irish coastal lagoons. (unpublished). National Parks and Wildlife Service, Dublin.
 Wilkes, R., Bennion, M., McQuaid, N., Beer, C., McCullough-Annett, G., Colhoun, K., Inger, R., Morrison, L. (2017) Intertidal seagrass in Ireland: Pressures, WFD status and an assessment of trace element contamination in intertidal habitats using *Zostera noltei*. *Ecological Indicators* 82, 117–130.

Synopsis version: V1.0

Synopsis date: April 2021

Synopsis author(s): P.M. Perrin

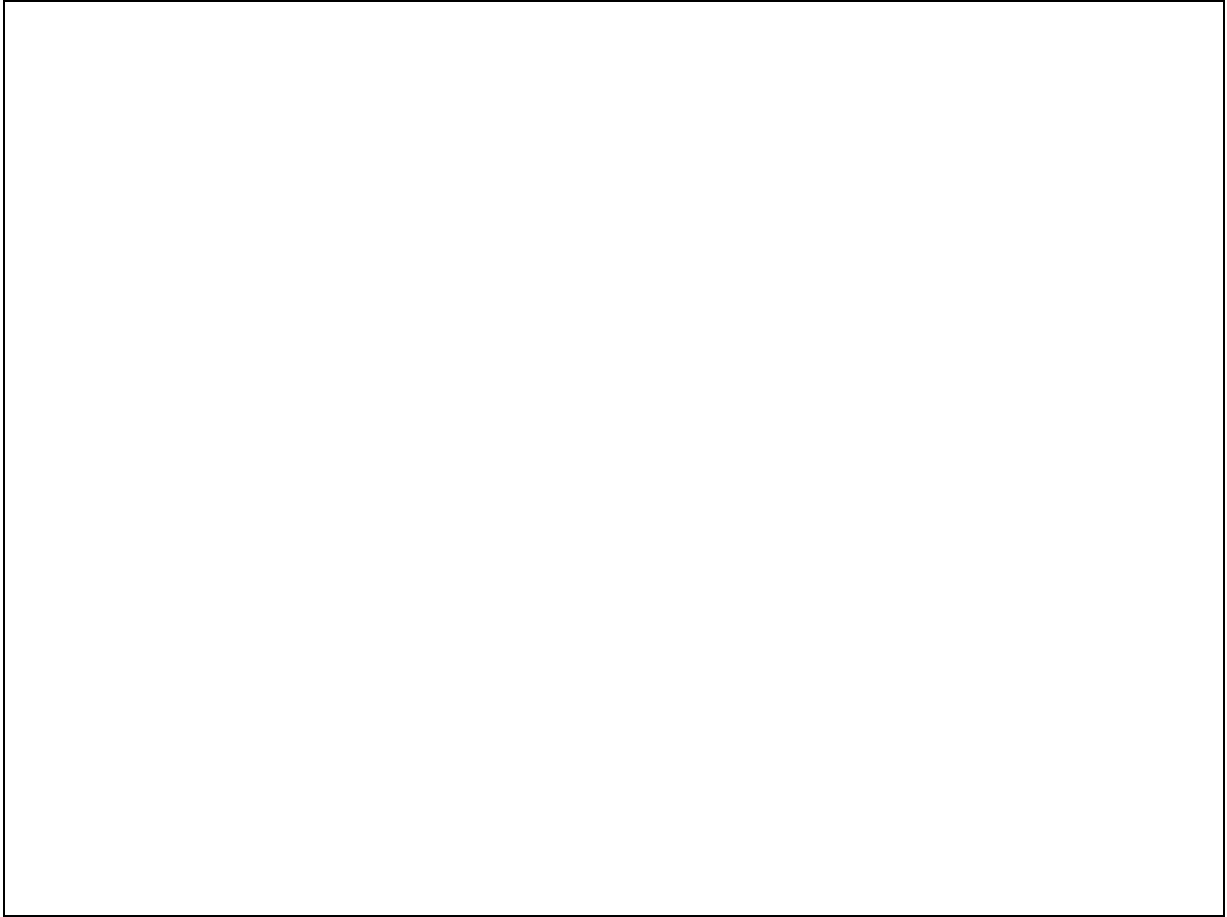


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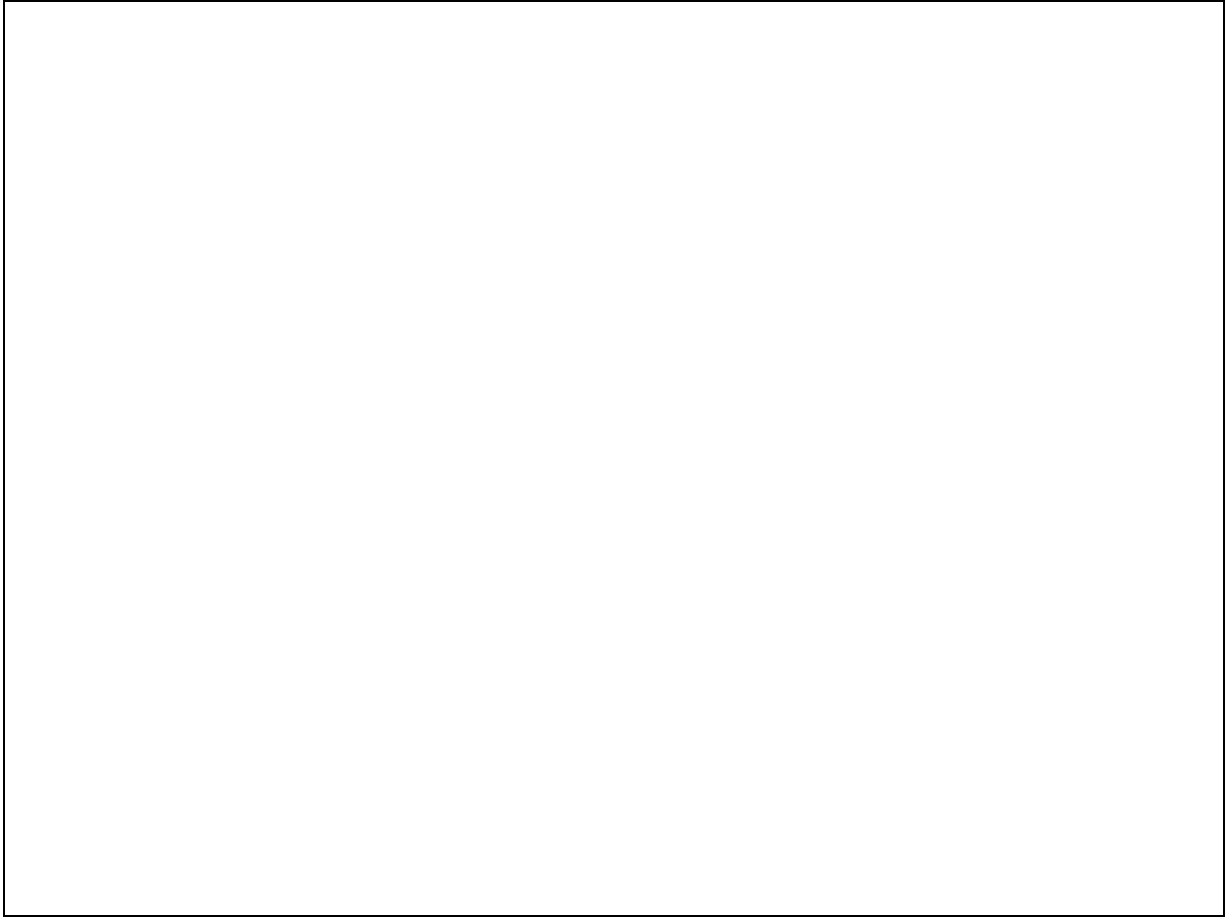


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